INDEX OF ABSTRACTS
Volume 24 (1977)

ABATZOGLOU, Theagenis. On the smoothness of the metric projection and C^2 manifolds, A-481.
ABDELKADER, Mostafa A. Indefinite-integral equations, A-236.
ABELES, Francine F. Bounds on simplicial volumes. Preliminary report, A-315.
ABERTH, Oliver. A method for exact computation with rational numbers, A-168.
ABIAN, Alexander. A new construction of free groups, A-225; Conditionally compact rings of functions and their compactification, A-396; Compactification of the domains of certain rings of functions, A-444; Compact partially ordered sets and compactification of partially ordered sets, A-530.
ABIAN, Alexander and SALBANY, Sergio. Wallman and other compactifications and matrices of zeros and ones, A-261.
ABLOW, C. M. Self-similar response of a thick-walled elastic-plastic pipe. Preliminary report, A-639.
ABLOW, C. M. and SCHECHTER, S. Campylotropic coordinates, A-349.
ABORN, Bruce J. and SHANKAR, Hari. Generalised growth of analytic functions, A-82; Generalised growth for functions of several complex variables analytic in a polydisc. Preliminary report, A-431; Generalised growth and convergence of analytic functions. Preliminary report, A-542; Generalised growth and convergence for analytic functions of several complex variables. Preliminary report, A-613.
ABRAHAM, Ralph H. Electro-optical exploration of forced Navier-Stokes bifurcations, A-331; Experimental dynamics with interactive computer graphics, A-637.
ABRAHAMSE, M. B. and DOUGLAS, R. G. Examples of the central decomposition for an analytic Toeplitz operator, A-578.
ABRAMOVICH, S. See STRELITZ, Sh.
ACCOLA, Robert D. M. Plane models for Riemann surfaces admitting certain half-canonical linear series (part 1), A-430; On generalized Weierstrass points on Riemann surfaces. Preliminary report, A-539.
ACKER, Andrew F. An isoperimetric inequality involving conformal mappings, A-12; Free boundary optimization problems involving geometric constraints, A-242; An inequality involving capacitance, A-424; A free boundary optimization problem involving weighted areas, A-539; Another free boundary optimization problem involving weighted areas, A-612.
ACKER, Andrew and WALTER, Wolfgang. On the global existence of solutions of parabolic differential equations with a singular nonlinear term, A-424.
ADAMOWICZ, Zofia. Constructible semilattices of degrees of constructibility, A-300.
AHMAD, Shair and LAZER, Alan. A new comparison theorem, A-94.
AIZLEY, Paul and SELFRIDGE, J. L. A lower bound for m(4), A-452.
AKBULUT, Selman and KIRBY, Robion. An exotic involution on S^4, A-353.
AKBULUT, Selman and KING, Henry. Realizing spaces by real algebraic varieties. Preliminary report, A-623.
AKCOGLU, M. A. and SUCHESTON, L. A ratio ergodic theorem for superadditive processes, A-554.
AKIBA, Tadatoshi. Local triviality in codimension one, A-570.
AKYILDIZ, Ersan. On the Bruhat decomposition. Preliminary report, A-418.
ALBERT, Jeffrey H. Generic bifurcation in the Taylor problem. Preliminary report, A-158.
ALBERTSON, Michael O. and HUTCHINSON, Joan P. On six-chromatic toroidal graphs, A-451.
ALEX, Leo J. Index two simple groups. II, A-564.
ALEXANDER, Charles C. See KINNEY, James.
ALEXANDER, H. Explicit imbedding of the (punctured) disc into C^2, A-472.
ALEXANDER, Roger K. Diagonally-implicit Runge-Kutta methods with error estimates for stiff O.D.E.'s. Preliminary report, A-170.
ALEXANDERSON, G. L. and WETZEL, John E. Lamination identities. Preliminary report, A-571.
ALEXIADES, Vasilios. Generalized solution for an initial-boundary value problem for a class of singular parabolic equations in a non-cylindrical domain. Preliminary report, A-97.
ALF, Carol. See O'CONNOR, Thomas A.
ALI, Mir M. See BOOKMYER, Lloyd D.
ALI, Mir M. and BOOKMYER, Lloyd D. A note on complete sufficient statistics, A-439.
ALIPRANTIS, C. D. and BURKINSHAW, O. On locally solid topologies on Riesz spaces, A-119.
ALLAN, Robert B. and LASKAR, Renu. On dominating and independent dominating numbers of a graph, A-417.
ALLEN, G. D. Duals of Lorentz spaces. Preliminary report, A-381.
ALLEN, Harry P. The octonians and exceptional simple Lie algebras over the real and complex fields, A-572.
ALLEN, Harry P. and TRUSHIN, David S. Coproper coalgebras, A-59; A generalization of the Frobenius structure of associative algebras. Preliminary report, A-222.
ALLEN, Richard J. Equivariant embeddings of finite abelian group actions. Preliminary report, A-339.
ALLINGER, Deborah. Characterization of (p, q, r)-absolutely summing operators on Hilbert space, A-486.
ALMGREN, F. J., Jr. Mass minimizing integral currents in R^n are almost everywhere regular. Preliminary report, A-541; Multiple valued solutions to variational problems and the regularity of mass minimizing integral currents, A-565.
ALMGREN, F. J., Jr. and SIMON, L. Existence of embedded solutions of Plateau's problem. Preliminary report, A-13.
ALPERIN, J. L. Invertible modules for groups, A-64.
ALSON, Pedro. Convexoid compact perturbations of operators. Preliminary report, A-380.
ALSPACH, Brian and PARSONS, T. D. Isomorphism of circulant graphs, A-624.
ALTMAN, Mieczyslaw. A strategy theory of solving equations. Preliminary report, A-169.
ALVES, Mauriso. Bieberbach's conjecture with $|a_3|$ restricted. Preliminary report, A-615.
ANACKER, Steven E. Reducible partitions. Preliminary report, A-521.
ANANTHARAMAN, R. Compact measures. Preliminary report, A-76.
ANDERSON, C. L. Random visibility models, A-166.
ANDERSON, Clifford H. Extending stability with Lyapunov techniques. Preliminary report, A-641.
ANDERSON, D. D. and HUCKABA, James. Integral closure in Noetherian rings, A-51.
ANDERSON, David F. Projective modules over subrings of k[x, y], A-51; Graded Krull domains, A-529.
ANDERSON, David F. and DOBBS, David E. Pairs of rings with the same prime ideals. Preliminary report, A-628.
ANDERSON, Douglas R. A triangulable space which possesses no natural PL structure, A-151.
ANDERSON, J. Milne and RUBEL, L. A. A characterization of hypernormal meromorphic functions in the unit disc, A-77.
ANDERSON, J. Milne, RUBEL, L. A., SQUIRES, W. A.

and TAYLOR, B. A. Convolution irreducibility in Euclidean space. Preliminary report, A-12; Irreducibility of certain entire functions. Preliminary report, A-323.
ANDERSON, James A. and HEAD, Tom. Pure diagrams of abelian groups. Preliminary report, A-345.
ANDERSON, Patricia and FREY, G. Thomas. Precalculus computer assisted statistics with parametric, nonparametric, and Bayesian integration. Preliminary report, A-188.
ANDERSON, Robert F. and FRIEDMAN, Avner. Quality control problems and quasi variational inequalities, A-162.
ANDERSON, William N., Jr. and TRAPP, George E. Properties of the pseudopowers of discrete analytic functions, A-99.
ANDREWS, George E. Partitions, q-series and the Lusztig-MacDonald-Wall conjectures, A-454.
ANDREWS, P. and ARKOWITZ, M. Sullivan's minimal model and higher order Whitehead products, A-147.
ANICHINI, Guiseppe and SCHUUR, Jerry D. Disconjugacy and growth estimates for solutions of a class of nonlinear differential equations, A-617.
ANSARI, M. S. and KHAN, R. S. Integrability of shifted trigonometric series, A-242.
ANSELONE, P. M. and LEE, J. W. A unified approach to the approximate solution of linear integral equations, A-171.
APPLING, William D. L. An integrability approximation representation theorem, A-10; A characterization of uniform absolute continuity, A-430.
ARGYROS, S. Applications of isomorphic embeddings of $\ell^1(\Gamma)$, A-539.
ARGYROS, S. and NEGREPONTIS, S. Isomorphic embedding of $\ell^1(\Gamma)$, A-538.
ARKIN, Joseph. Magic squares in motion with equal sums of like powers, A-448.
ARKOWITZ, M. See ANDREWS, P.
ARMENDARIZ, Efraim P. On fixed rings of automorphisms. Preliminary report, A-57.
ARMENDARIZ, Efraim P., FISHER, J. W. and SNIDER, R. L. On injective and surjective endomorphisms of finitely generated modules, A-56.
ARMSTRONG, Alan. Central Fourier-Stieltjes transforms with an isolated value, A-110.
ARNOW, Barry J. Dedekind completions of lattices by ends, A-377.
ARONSON, D. G. and WEINBERGER, H. F. Travelling wave solutions for a class of translation invariant recursions, A-122.
ARSOVE, Maynard and JOHNSON, Guy, Jr. Green's lines methods in the theory of H^p spaces. Preliminary report, A-470.
ASH, Chris and ROSENTHAL, John W. On the lattice of algebraically closed subfields of an algebraically closed field of characteristic 0, A-50.
ASH, J. Marshall. On strong restricted (2,2) convolution operators. Preliminary report, A-112.
ASHKENAZI, Max. On periodic solutions of functional differential equations. Preliminary report, A-383.
ASIMOV, Daniel. Product measures and random integers. Preliminary report, A-554.
ASKEY, Richard. Historical remarks on orthogonal polynomials. Preliminary report, A-26; The q-gamma function, A-566.
ASKEY, Richard and WILSON, James A. A new set of basic hypergeometric orthogonal polynomials. Preliminary report, A-325.
ASSA, Steven B. Contributions to the classification of finite groups by standard subgroups, A-71.
ASSMUS, E. F., Jr. and MATTSON, H. F., Jr. A combinatorial lemma and the exactness of the BCH bound, A-34.
ASTBURY, Ken. Amarts indexed by directed sets, A-160.
ATALLA, Robert. On joint ergodicity of T and T^*, A-236.
AUBIN, Jean-Pierre. Monotone trajectories of differential equations, A-97.
AUCHMUTY, Giles. Axisymmetric figures of equilibrium of rotating self-gravitating liquids, A-576.
AULL, C. E. Absolute z and C-embedding. Preliminary report, A-141; Absolute C-embedding in P- and Z-spaces, A-301; Absolute C^*-embedding of P-spaces, A-495.
AUPETIT, B. Capacity and uniform algebras. Preliminary report, A-15.
AUSTIN, Bill R. Generalized quasi Stieltjes integral. Preliminary report, A-75.
AXLER, Sheldon, CHANG, Sun-Yung A. and SARASON, Donald. Products of Toeplitz operators. II. Preliminary report, A-640.
AZARNIA, Nazanin. Center-valued weights on von Neumann algebras. Preliminary report, A-127.
AZPEITIA, Alfonso G. On entire functions of bounded index defined by Dirichlet expansions, A-614.
AZUMAYA, Goro. Dense embedding for locally projective modules, A-460.
BAERNSTEIN, Albert II. Maximal functions in complex analysis, A-576.
BAGGETT, Larry and TAYLOR, Keith. A sufficient condition for the complete reducibility of the regular representation, A-556.
BAGLIVO, Jenny A. An equivariant Wall obstruction theory, A-147.
BAILEY, David H. Sequential schemes for classifying and predicting ergodic processes, A-256.
BAILEY, James L. A characterization of Alexander invariants of links. Preliminary report, A-396.
BAILLIEUL, John B. Control problems associated to singular Riemannian metrics, A-568.
BAILLON, J.-B., BRUCK, R. E. and REICH, S. Asymptotic behavior of nonexpansive mappings and semigroups in Banach spaces, A-427; Asymptotic behavior of nonexpansive mappings and semigroups in Banach spaces, A-586.
BAIRD, Bridget B. Inverse semigroups of homeomorphisms between open subsets. Preliminary report, A-70.
BAJAJ, Prem N. Some constructions in semidynamical systems, A-475.
BAKER, Daniel. Differential characters and Borel cohomology, A-633.
BAKKE, Vernon L. Optimal control problems involving integral equations with delays. Preliminary report, A-132.
BALCAR, B. and HÁJEK, P. A sequence of degrees of constructibility, A-251.
BALDWIN, John T. Some universal Horn logic. Preliminary report, A-437.
BALL, J. A., OLIN, R. F. and THOMSON, J. E. Weakly closed algebras of subnormal operators, A-125.
BALL, Richard N. and KENNY, G. Otis. Uniform completions of a lattice ordered group. Preliminary report, A-41.
BALLEW, David and THOLEN, Ronald. On $\Psi(x+y) \leq \Psi(x) + \Psi(y)$, A-521.
BANCHOFF, Thomas F. and McCRORY, Clint. A combinatorial formula for normal Stiefel-Whitney classes. Preliminary report, A-154.
BANCHOFF, Thomas F. and STRAUSS, Charles M. A reinvestigation of the centro-surface of the ellipsoid, A-334.
BANERJI, Ranan. Some results on games graphs, A-31.
BANK, Steven B. Some results on the Gamma function and other hypertranscendental functions, A-380.
BANKS, H. T. Approximation methods for control of hereditary systems, A-308.
BANKSTON, Paul. On the ultrapower theorem, A-391; The infinite distributivity of some regular open algebras, A-556; Resolvability of topological ultraproducts. Preliminary report, A-621.
BARBACK, Joseph. Regressive isols and series over their finite sums, A-399.
BARNARD, Roger W. and KELLOGG, Charles N. On generalized convolution operators applied to majorization and subordination problems, A-83.
BARRAR, Richard B. Uniqueness of monosplines with odd multiplicity of least norm, A-480.
BARRATT, Michael and HANKS, Christopher. On the structure of Thom spaces. Preliminary report, A-339.
BARRIA, Jose and HERRERO, Domingo. Closure of similarity orbits of nilpotent operators. Preliminary report, A-240; The similarity orbit of a biquasitriangular operator, A-292.
BARRODALE, Ian. Best approximation of complex-valued data, A-505.
BARROW, David L. On multiple node Gaussian quadrature

formulae, A-104.
BARROW, David L. and SMITH, Philip W. Asymptotic properties of best $L_2[0,1]$ approximation by splines with variable knots. Preliminary report, A-480.
BARTH, Karl F. Generalizations of Iversen's theorem, A-307.
BARTH, Karl F., BRANNAN, D. A. and HAYMAN, W. K. The growth of plane harmonic functions along an asymptotic path, A-84.
BARWISE, Jon. Beyond first-order logic, A-28.
BASTIAN, Joseph J. Transitive algebras and bundle shifts, A-130.
BATEMAN, Paul T. Showing that two polynomials are relatively prime, A-459.
BATES, Peter W. Nonlinear nodal problems and approximation by projection methods, A-90.
BATESON, Ann. Groupoids in a variety. Preliminary report, A-374.
BATIGNE, Daniel. Integral generalized inverses of integral matrices. Preliminary report, A-234; Note on integral {1}-inverses of integral matrices, A-370.
BAUDISCH, Andreas. The theory of abelian p-groups with the quantifier 1 is decidable, A-254.
BAUMGARTNER, James E. and TAYLOR, Alan D. Partition theorems and ultrafilters, A-36.
BAUMSLAG, Gilbert, CANNONITO, Frank B. and MILLER, Charles F. III. Infinitely generated subgroups of finitely presented groups. II. Preliminary report, A-233.
BAXTER, David K. The existence of matrices with prescribed characteristic and permanental polynomials, A-625.
BAXTER, J. R. Recurrent potentials and random times, A-160.
BAXTER, Willard E. A condition of Brauer-Cartan-Hua type, A-57.
BAXTER, Willard E. and MARTINDALE, Wallace S. III. Jordan automorphisms of semiprime rings. Preliminary report, A-375.
BAYBARS, Ilker. See NISHIZEKI, Takao.
BAZELOW, Alexander R. and BRICKLE, Frank. A partition problem posed by Milton Babbitt (Part I). Preliminary report, A-372.
BAZLEY, Norman W. and LEHNIGK, Siegfried H. Faedo-Galerkin approximations for evolution equations with reproducing nonlinearities. Preliminary report, A-241.
BEACHY, John A. Inversive localization at prime Goldie ideals. Preliminary report, A-463.
BEAM, Richard M. See WARMING, R. F.
BEAR, H. S. and HILE, G. N. Algebras which satisfy a second order linear P.D.E., A-113.
BEARD, Jacob T. B., Jr., BULLOCK, Alice T. and HARBIN, Mickie S. Infinitely many perfect and unitary perfect polynomials over some GF(q), A-624.
BEASLEY, Leroy B. Linear transformations on matrices: The invariance of commuting pairs of matrices, A-561.
BEASLEY, LeRoy B. and CUMMINGS, Larry J. Permanent semigroups, A-54.
BEAVER, O. R. and COOK, T. A. States on quantum logics and their connection with a theorem of Alexandroff, A-568.
BECK, Anatole. Conditional independence, A-336.
BECK, Robert E. and KOLMAN, Bernard. Random methods for constructing Cartan subalgebras of Lie algebras. Preliminary report, A-62.
BECK, Walter E. and NAJAR, Rudolph M. More reduced amicable pairs. Preliminary report, A-47.
BECKENBACH, E. F. Topology of the fundamental theorem of algebra for minimal surfaces, A-495.
BECKER, Joseph, HENSON, C. Ward and RUBEL, Lee A. The problem of moduli for plane domains is undecidable. Preliminary report, A-580.
BECKNER, William. Inequalities in Fourier analysis, A-108; Convolution inequalities and Fourier analysis, A-331.
BEDDINGTON, John R. On the characteristics of successful biological control, A-508.
BEDFORD, Eric and FORNAESS, John Erik. Complex manifolds in pseudoconvex boundaries, A-471.
BEEM, John K. A metric topology for causally continuous completions, A-177.
BEER, Gerald. Tax structures whose progressivity is inflation neutral, A-178.
BEINEKE, L. W. and RINGEISEN, R. D. On crossing numbers of certain products of graphs. Preliminary report, A-39.
BELEGRADEK, O. V. An algebraic characterization of groups with solvable occurrence problem, A-393; An algebraic characterization of groups with solvable decision problems, A-436.
BELL, Gregory W. Cohomology of degree 1 and 2 of the Suzuki groups, A-67.
BELL, Harold. See DICKMAN, R. F., Jr.
BELL, Murray G. A cellular constraint in supercompact Hausdorff spaces, A-394.
BELL, Murray G. and van MILL, Jan. The compactness number of a topological space, A-444.
BELL, Wayne C. A decomposition of additive set functions, A-75; On the subdivision norm infimum function, A-238; Commutativity and representability properties of decompositions of additive set functions, A-512.
BELLENOT, Steven F. Factorization of compact operators and finite representability of Banach spaces, A-119; Every Schwartz Fréchet space is a subspace of a Schwartz Fréchet space with an unconditional basis, A-630.
BELLMAN, Richard. Generalizations of the Pade approximation. Preliminary report, A-384.
BELNA, C., BONAR, D., CARROLL, F., COLWELL, P. and PIRANIAN, G. An annular Tsuji function, and its Julia points, A-385.
BENABDALLAH, K., BRADLEY, R. and LAROCHE, A. Quasi p-neat injective and projective groups. Preliminary report, A-4.
BENDERSKY, Martin. The unstable Novikov spectral sequence for the spheres, A-498.
BENHAM, Craig. Catastrophes and protein conformation, A-190.
BENKOSKI, Stanley J. The probability that k polynomials are relatively r-prime. Preliminary report, A-343.
BENNETT, Colin, RUDNICK, Karl and VAALER, Jeffrey D. Best uniform approximation by linear fractional transformations, A-105.
BENNETT, D. E. Mappings that preserve certain nonseparating subcontinua. Preliminary report, A-144; Mappings that preserve certain nonseparating subcontinua. Preliminary report, A-357.
BENNETT, Grahame. An extension of the Riesz-Thorin theorem, A-125.
BENNETT, H. R. and BERNEY, E. S. Spaces with σ-minimal bases. Preliminary report, A-259.
BENSON, Donald C. A Riccati-like equation: Principal solutions for Liénard's equation, A-640.
BERENSTEIN, Carlos A. On the converse to Pompeiu's problem, A-243.
BERGER, Alan E. See CIMENT, Melvyn.
BERGER, Marc A. Stochastic Ito-Volterra equations, A-256.
BERGER, Mel S. On the singularities of nonlinear Fredholm operators and their applications, A-130.
BERKEY, Dennis D. and FREEDMAN, Marvin I. Buckled elastica at contact: A perturbation analysis. Preliminary report, A-567.
BERKEY, Dennis, FREEDMAN, Marvin, and GRANOFF, Barry. Bifurcation analysis in systems with switch-type coefficient functions, A-91.
BERKOVICS, Carlos M. Optimal linear programming modeling given well known circumstances and a finite capability of perturbation, A-246.
BERKSON, A. J. and McCONNELL, Alan. Using categorical constructions in the category of algebraic function fields, A-49.
BERMAN, David M. Critical graphs for acyclic colorings. Preliminary report, A-36.
BERMAN, Elizabeth. Logic and intuition in basic mathematics, A-188.
BERNER, Andrew J. Spaces with dense conditionally compact subsets. Preliminary report, A-142.
BERNEY, E. S. See BENNETT, H. R.
BERNEY, E. S. and NYIKOS, P. J. Length, width and breadth of Boolean algebras, A-42.
BERNFELD, Stephen R. and LAKSHMIKANTHAM, V. Generalized finite time stability and Liapunov functions, A-92.

BERRY, J. W. Representation of e-degrees. Preliminary report, A-299.
BERS, Lipman. Quasiconformal mappings with applications to ordinary differential equations, complex analysis and topology. Retiring Presidential Address, A-79.
BERSTEIN, Israel and EDMONDS, Allan L. Branched coverings of 3-manifolds. Preliminary report, A-261.
BERSTEIN, Israel, COHEN, M. and CONNELLY, R. Contractible, noncollapsible products with cubes, A-445.
BERTHOLF, Dennis and WALLS, Gary. Properties of finite quasi-injective groups, A-224.
BERTIGER, William. Maximum principles for weakly coupled elliptic systems, A-96.
BERTSEKAS, Dimitri P. See SHREVE, Steven E.
BERZSENYI, George. Methods for constructing linear difference operators which simulate analyticity, A-78.
BEYER, W. A. See McCALL, J. D.
BHASKARAN, M. On a norm theorem. Preliminary report, A-4; On a norm theorem. Preliminary report, A-278.
BHASKARAN, R. and NAIK-NIMBALKAR, U. Banach algebras of Lipschitz functions over valued fields. Preliminary report, A-294.
BICKNELL-JOHNSON, M. See HOGGATT, V. E., Jr.
BILYEU, Russell G. A metric inequality for barycenters in weakly compact sets, A-119.
BILYEU, Russell G. and LEWIS, Paul W. Compact and weakly compact operators on C(H). Preliminary report, A-382.
BINDSCHADLER, David E. Examples of singular solutions to the oriented Plateau problem. Preliminary report, A-11.
BIRKENMEIER, Gary F. Ker-injective modules. Preliminary report, A-60.
BISHOP, Wayne. How to construct a regular polygon. Preliminary report, A-133.
BITTMAN, Richard M. and LEVY, Lawrence S. Idempotent artinian rings and unitary modules, A-464.
BIX, Robert. Separable Jordan algebras over commutative rings. Preliminary report, A-419.
BLACKMAN, Jerome. Geometric quantization and the Feynman path integral, A-18.
BLACKMORE, Denis. On local normal forms for diffeomorphisms and flows. Preliminary report, A-313; A class of pathological diffeomorphisms, A-502.
BLAIR, Charles E. Approximate fixed points in rectangular arrays, A-387; Convex optimization and Lagrange multipliers, A-434.
BLAIR, David E., LEDGER, Arthur J. and SHOWERS, Donald K. 4-symmetric spaces. Preliminary report, A-138.
BLAKE, Ian F. and DEZA, M. Coding with permutations. Preliminary report, A-416.
BLAKE, Louis H. Approximate martingales plus uniform integrability conditions are equivalent to games which become fairer with time, A-165.
BLASS, Josef and STEINER, Ray. The diophantine equation $y^2 + k = x^7$, A-228.
BLASS, Piotr. A class of surfaces introduced by O. Zariski. Preliminary report, A-322.
BLATTNER, Meera and HEAD, Tom. Free monoids and transducers, A-646.
BLEICK, Willard E. and WANG, Peter C. C. Asymptotic representation of Stirling numbers of the second kind, A-374.
BLOCK, Louis. Continuous maps of the interval with finite nonwandering set, A-139.
BLOK, W. J. The lattice of varieties of modal algebras, A-532.
BLOOM, Frederick. Stability and growth estimates for electric fields in nonconducting material dielectrics, A-306.
BLUM, Edward K. Numerical solution of eigentuple-eigenvector problems in Hilbert spaces, A-173.
BLUM, Manuel. Toward a mathematical theory of inductive inference, A-645.
BLYTH, T. S. Baer semigroup coordinatisations of modular lattices, A-609.
BOAS, R. P. The Jensen-Steffensen inequality, A-324.
BODY, Richard. See DOUGLAS, Roy.
BOGART, Kenneth. See GORDON, Jean.
BOGART, Kenneth, GOLDBERG, Don and GORDON, Jean. An elementary proof of the MacWilliams theorem on equivalence of codes, A-184.
BOLLOBAS, B., CHUNG, F. R. K. and GRAHAM, R. L. On complete bipartite subgraphs contained in spanning tree complements, A-627.
BONAR, D. See BELNA, C.
BONDARENKO, B. A., LEUNG, K. V., MANGERON, D. J. and OGUZTORELI, M. N. Operational representation of solutions of a class of polylinear equations, A-244.
BOOKMYER, Lloyd D. See ALI, Mir. M.
BOOKMYER, Lloyd D. and ALI, Mir M. Partition approach to sufficiency, A-553.
BOONE, James R., DAVIS, Sheldon W. and GRUENHAGE, Gary. Cardinal functions for k-spaces, A-442.
BORDIN, Benjamin. "Weakly strongly" singular integral operators on atomic Hardy spaces. Preliminary report, A-616.
BORGES, Carlos R. Blumberg's theorem holds for stratifiable spaces. Preliminary report, A-260.
BOROSH, I. and TREYBIG, L. B. Bounds on positive integral solutions of linear diophantine equations II. Preliminary report, A-422.
BOROSH, I., CHUI, C. K. and ERDOS, P. Change of signs in infinite series. Preliminary report, A-477.
BORWEIN, D. and JAKIMOVSKI, A. Generalized weighted Hausdorff matrices as bounded operators over ℓ^p. Preliminary report, A-101.
BOWNDS, John M. A modified Galerkin approximation method for Volterra equations with smooth kernels. Preliminary report, A-237.
BOYD, J. N. and RAYCHOWDHURY, P. N. Finite group representation techniques in Lagrangian mechanics, A-567.
BOYLAN, Stanley L. Abstract Wiener spaces for non-Gaussian measures, A-311.
BOYLE, Ann K. and FELLER, E. H. Semicritical modules and k-primitive rings, A-462.
BRACE, J. W. and TOMSISON, J. D. Uniform filter convergence and pointwise filter convergence for function spaces, A-118.
BRADLEY, J. Scott. Generalized Hardy's inequalities with weights, A-615.
BRADLEY, R. See BENABDALLAH, K.
BRAKKE, Kenneth A. The motion of a surface by its mean curvature, A-574.
BRAMBLE, James H. Finite element methods for elliptic and parabolic problems, A-172.
BRAMSON, Maury D. Maximal displacement of branching Brownian motion, A-614.
BRANDAL, Willy. Domains whose finitely generated modules decompose. Preliminary report, A-50.
BRANNAN, D. A. See BARTH, Karl F.
BRANNIGAN, M. Generalised Remez algorithm, A-168.
BRAUDE, Eric John. Some topological implications of cocontinuity, A-140; Rings of cocontinuous functions on a lattice. Preliminary report, A-317.
BRAUDE, Eric John and KWAN-YUK, Claire Sit. A homotopy theory for posets, A-494.
BRAUER, Fred. Periodic solutions of some ecological models, A-509.
BRECKENRIDGE, J. C. and NISHIURA, T. L^1-convergence of the Jacobians of uniformly convergent sequence of smooth maps. Preliminary report, A-73.
BREMERMANN, Hans J. Algorithms and optimization in biology. Survey, A-351.
BRENNAN, James E. Invariant subspaces and subnormal operators, A-574.
BRENNER, J. L. A unified treatment of some means of classical analysis. Preliminary report, A-346; Covering theorems for finasigs. IX. How the square of a class with two nontrivial orbits in S_n covers A_n. A-609.
BRENT, Richard P. The first 40,000,000 zeros of $\zeta(s)$ lie on the critical line. Preliminary report, A-417.
BRENTON, Lawrence J. On rational Gorenstein singularities in dimension greater than two, A-472.
BRESSOUD, David M. Generalizstion of the Rogers-Ramanujan identities for all moduli, A-520.
BREWER, J. W. and COSTA, D. L. Projective modules over some nonnoetherian rings. Preliminary report, A-233.
BREWER, J. W., RUTTER, E. A. and WATKINS, J. J. Coherence of R[[X]] when R is von Neumann regular, A-52.

BREWSTER, Ben and OTTAWAY, Malcolm. The supersolvable residual of an L_1-group. Preliminary report, A-68.
BREZIN, Jonathan. Solvable Lie groups as a source of problems in analysis, A-635.
BRICKLE, Frank. See BAZELOW, Alexander R.
BRILLHART, John, ERDŐS, Paul and MORTON, Patrick. The cumulative distribution of the sequence $\{s(n)/\sqrt{n}\}$ associated with the Rudin-Shapiro sequence, A-456.
BROM, James D. Almost periodic functions in constructive mathematics, A-107.
BRONSON, E. Existence of weak solutions of differential equations in arbitrary Banach space, A-92.
BRONSON, Richard and JONES, Alan. Differential equations with a minicomputer, A-89.
BROOKS, James K. and DINCULEANU, Nicolae. Weakly compact operators on $L^1(\mu, E)$. Preliminary report, A-114.
BROVERMAN, Samuel. N-compact spaces, A-142; Another realcompact, 0-dimensional, non-N-compact space. Preliminary report, A-441.
BROVERMAN, Samuel, GINSBURG, J., KUNEN, K. and TALL, F. D. Topologies determined by σ-ideals on ω_1, A-558.
BROWN, Gerald G. and GRAVES, Glenn W. Use of simple algebraic structures for implementing algorithms in large scale mathematical programming. Preliminary report, A-351.
BROWN, H. I. and ROBINSON, I. J. W. On isomorphisms between certain subalgebras of B(X), A-125.
BROWN, James Ward. A new generating function for Laguerre polynomials. Preliminary report, A-536.
BROWN, Johnny M. and LEE, Ken W. The distance set of $C_\lambda \times C_\lambda$. Preliminary report, A-30.
BROWN, R. and HIGGINS, P. J. On homotopy excision. Preliminary report, A-559.
BROWN, R. C. Selfadjoint subspace extensions of symmetric differential operators defined on closed subspaces of infinite codimension. Preliminary report, A-236.
BROWN, R. C. and TVRDY, M. Generalized boundary value problems and variational analysis. Preliminary report, A-132.
BROWN, Robert D. Construction of elementary divisors for finitely perturbed Banach systems, A-129.
BROWN, Robert F. Cohomology of homomorphisms of Lie algebras and Lie groups. Preliminary report, A-151; Equations on manifolds, A-497.
BROWN, William C. Differentially simple rings, A-376.
BROWNELL, F. H. Indefinite metric, quantum axiomatics, and the Markov property. Preliminary report, A-506.
BROWNING, Wesley J. A relative Neilsen theorem. Preliminary report, A-289; The homotopy classification of nonminimal 2-complexes with given finite fundamental group. Preliminary report, A-559.
BRUCE, Kim B. Forcing in stationary logic. Preliminary report, A-21.
BRUCK, Ronald E. Construction of periodic solutions of periodic contractive evolution systems. Preliminary report, A-474.
---. See BAILLON, J.-B.
BRUCK, Ronald E. and REICH, Simeon. Nonexpansive projections and resolvents of accretive operators in Banach spaces, A-428; Nonexpansive projections and resolvents of accretive operators in Banach spaces, A-586.
BRUEN, Aiden A. Families of skew lines in PG(3, q), A-134.
BRYANT, J. L. and LACHER, R. C. Resolving 0-dimensional singularities in generalized manifolds. Preliminary report, A-396.
BRYANT, Paul. See MACON, Nathaniel.
BRYDGES, David. An application of functional integration to the Coulomb gas. Debye screening. Preliminary report, A-313.
BUCK, R. C. Applications of dispersion mapping theorems, A-482.
BUCKHOLTZ, J. D. Uniqueness theorems for entire functions, A-327.
BUCKLEY, James J. Arrow's impossibility theorem for societal choice functions. Preliminary report, A-544.
BULLOCK, Alice T. See BEARD, Jacob T. B., Jr.
BULMAN-FLEMING, Sydney and McDOWELL, Kenneth. The category of mono-unary algebras, A-528; Absolutely flat commutative semigroups, A-608.
BUMBY, Richard T. Continued fractions in the real and 2-adic fields, A-456.
BUMILLER, Carl. Pointwise products of incidence matrices of subgraphs. Preliminary report, A-305.
BUNTINAS, Martin. Cesàro summability methods of negative order, A-101.
BUONOMANO, Vincent. A limitation on Bell's inequality, A-433; Low-intensity interference effects and local hidden variable theories, A-542.
BURBEA, Jacob. The curvatures of the analytic capacity, A-307.
BURCHARD, H. G. Least total variation data smoothing. Preliminary report, A-481.
BURKE, Dennis K. Pseudo-open mappings from topological sums. Preliminary report, A-558.
BURKINSHAW, O. See ALIPRANTIS, C. D.
BURNS, David and SCHUSTER, S. Every (p, p-2)-graph is contained in its complement, A-34; Embedding (p, p-1) graphs in their complements, A-625.
BURNS, T. J. and KYNER, W. T. Nonlinear resonance in celestial mechanics with applications to the rotation of Mercury, A-637.
BURR, Stefan A. On the computational complexity of Ramsey-type problems. Preliminary report, A-627.
BURR, Stefan A., ERDŐS, P., GRAHAM, R. L. and LIN, S. Sums involving reciprocals of least common multiples. Preliminary report, A-458.
BURRIS, Stanley N. Two results using B-separating algebras. Preliminary report, A-452.
BURTON, Robert P. See ROCKWOOD, Alyn P.
BUSBY, Robert C. and SMITH, Harvey A. Compactness of product-convolution operators, A-123.
BUTTON, Lillian and WILKER, John B. Cutting exponents, A-493.
BUTTON, Robert Warren. A note on the Q-topology, A-142.
BYRD, Richard D., LLOYD, Justin T. and STEPP, James W. Representability of groups of complexes of a lattice-ordered group. Preliminary report, A-41.
BYRD, Richard D., LLOYD, Justin T., STEPP, James W. and PEDERSEN, F. D. The automorphism group of the semigroup of complexes of a dihedral group. Preliminary report, A-65.
CAFFARELLI, Luis. Further regularity for the n-dimensional Signorini problem, A-575.
CAFFARELLI, Luis A. and RIVIERE, N. M. Existence and uniqueness for the problem of filtration through a porous medium, A-576.
CAHILL, Rotraut G. A boundary value problem for $H^\infty(D)$. Preliminary report, A-9.
CAICEDO, Xavier. On extensions of $L(Q_1)$. Preliminary report, A-437; A-586.
CAIRNS, Stewart S. Canonical knot projections and double point structures, A-395.
CALDERÓN, A. P. and TORCHINSKY, A. $H^p(R^n)$ multipliers, $0 < p < \infty$, A-106.
CALLAHAN, James. Sketching umbilics. Preliminary report, A-332.
CAMILLO, Victor P. and ZELMANOWITZ, J. On the Goldie dimension of a sum of two modules. Preliminary report, A-465.
CAMPBELL, Douglas M. and LAMOREAUX, Jack. Necessary and sufficient conditions for a plane continua with weak limit directions to be a line segment, A-82.
CAMPBELL, Paul J. A short history of Zorn's lemma, A-26.
CAMPBELL, Stephen L. and GELLAR, Ralph. On asymptotic properties of several classes of operators, A-126.
CAMPBELL, Stephen L. and ROSE, Nicholas J. Singular perturbation of autonomous linear systems, A-475.
CANNON, James W. Constructing and shrinking cell-like decompositions of manifolds, A-153; What is a topological manifold? The characterization problem, A-501.
CANNON, James W. and WRIGHT, David G. Slippery Cantor sets in E^n, A-153.
CANNON, John R. Galerkin procedures for systems of

parabolic partial differential equations related to the transmission of nerve impulses. Preliminary report, A-190.
CANNONITO, Frank B. See BAUMSLAG, Gilbert.
CANTOR, Murray. The York decomposition, conformal metrics on $\mathbb{R}^n$ and initial data sets for general relativity, A-156.
CANTWELL, John and CONLON, Lawrence. Leaves with polynomial growth, A-151.
CARGO, Gerald T. A zero-one law for orthogonal complements of invariant subspaces, A-83.
CARLITZ, L. Multiple power series with zero-one coefficients, A-449.
CARLSON, B. C. Error bounds for an asymptotic expansion of a confluent hypergeometric function, A-85.
CARLSON, Jon F. Restriction of modules over modular group algebras, A-68.
CARLSON, Timothy. On the complexity of ω_1-saturated ideals on ω. Preliminary report, A-253.
CARMICHAEL, Richard D. Distributional boundary values in K'_p: The boundary value results. Preliminary report, A-122.
CARPENTER, Ronn L. Accessible points in the spectrum of a Frechet algebra, A-117.
CARROLL, F. See BELNA, C.
CARROLL, Robert W. The group theoretic nature of certain recursion relations for singular Cauchy problems, A-12; Some remarks on degenerate Cauchy problems in general spaces, A-235; Uniqueness theorems for abstract differential equations, A-294.
CARTER, James W. A remark on the complex exponential function. Preliminary report, A-429.
CASSON, Andrew J. and HARER, John L. Some Brieskorn homology 3-spheres which bound contractible manifolds. Preliminary report, A-398.
CASTRO, Alfonso. Hammerstein integral equations with indefinite kernel, A-425.
CASTRO, Alfonso and LAZER, Alan C. On the number of solutions of a nonlinear Dirichlet problem, A-98.
CATER, F. S. On absolutely continuous functions, A-426; On desarguesian projective planes, A-548.
CENZER, Douglas. Ordinal recursion over the continuum, A-29.
CENZER, Douglas and MAULDIN, R. Daniel. On a theorem of Wesley, A-383.
CESARI, Lamberto. Nonlinear differential equations in the frame of functional analysis and bifurcation theory with applications to a boundary value problem for quasi linear hyperbolic systems, A-124.
CHACON, R. Generalizations of martingales and of Markov processes, A-76.
CHALMERS, Bruce L. and METCALF, Frederic T. There exists a minimal projection from C onto V_{n+1} which is either singular or has finite carrier, A-479.
CHAN, Agnes H. Embedding of a pseudo-point-residual design into a Möbius plane, A-564.
CHANDRA, Jagdish, LAKSHMIKANTHAM, V. and LEELA, S. A monotone method for infinite systems of nonlinear boundary value problems, A-92.
CHANDRAN, V. R. On two analogues of Cohen's theorem to join semilattices. Preliminary report, A-230; A note on Padmanabhan's paper, A-373.
CHANEY, Robin and GOLDSTEIN, Alan A. An extension of the method of subgradients, A-482.
CHANG, K. On the number of nonisomorphic group divisible designs. Preliminary report, A-222; On handcuffed designs. Preliminary report, A-368; On the existence of handcuffed designs. Preliminary report, A-414.
CHANG, Mou-Hsiung. Local asymptotic behavior for Brownian motion in Banach spaces. Preliminary report, A-276.
CHANG, Sun-Yung A. See AXLER, Sheldon.
CHAO, J.-A. Conjugate systems of Martingales. Preliminary report, A-162.
CHARLESWORTH, Arthur. On the cardinality of a topological space. Preliminary report, A-259.
CHARTRAND, Gary, GOLDSMITH, Donald L. and SCHUSTER, Seymour. A result on 1-factors. I, A-35; A result on 1-factors. II, A-35.
CHASTKOFSKY, Leonard. Cartan invariants of finite groups of Lie type. Preliminary report, A-609.
CHATFIELD, J. A. A representation theorem for operators on a space of interval functions, A-75.
CHATTERJEE, Anadi Kumar. See DEBNATH, Lokenath.
CHATTERJEE, Anadi K. and DEBNATH, Lokenath. Nonlinear model of wave propagation in interlacing tidal channels, A-619.
CHAWLA, L. M. and GIRSE, Robert D. An additive arithmetic function and its inversely associated partition function over the Gaussian integers, A-44.
CHEN, Bang-yen. Complex submanifolds in Hermitian symmetric spaces. Preliminary report, A-302; Nonimmersion theorems for nonlinear algebraic hypersurfaces, A-395; Reduction theorems for extrinsic spheres in symmetric spaces, A-620.
CHEN, Jau-D. and SHIEH, Narn-R. On a sufficient condition for the convergence of multiple Fourier series. Preliminary report, A-241.
CHENEY, E. W. See FRANCHETTI, C.
CHENG, Charles Ching-An and WU, Yel-Chiang. Second cohomology groups of monoids. Preliminary report, A-63.
CHENG, P. Y. Introducing a sest--its properties and applications, A-462.
CHERNOFF, Paul R. Remarks on convergence and approximation of operator semigroups. Preliminary report, A-641.
CHEROWITZO, William. On the extension of pseudo-oval configurations. Preliminary report, A-37.
CHILANA, Ajit K. and ROSS, Kenneth A. Spectral synthesis in hypergroups, A-484.
CHIN, Raymond C. Y. Computational aspects of chemically reacting porous medium flows, A-644.
CHIOU, Kuo-Liang. The geometry of indefinite J-spaces and stability behavior of linear systems, A-94.
CHIRIACESCU, S. T., LEUNG, K. V., MANGERON, D. J. and OGUZTORELI, M. N. Stability of nonlinear dynamic machining systems with time-lags, A-297.
CHIVUKULA, R. Rao and SARMA, I. Ramabhadra. Tensor products of subspaces of continuous function spaces. Preliminary report, A-120.
CHOE, Tae Ho. Congruence weak regularity and a concept of ideal for universal algebras, A-271.
CHONG, C. T. Generic sets and minimal α-degrees. Preliminary report, A-391.
CHOODNOVSKY, D. V. Infinite chains of nonlinear equations of evolution associated with one-dimensional many-body problems. I. Preliminary report, A-387.
CHOODNOVSKY, D. V. and CHOODNOVSKY, G. V. Normal form of infinite system of ordinary differential equations, A-239; The law of addition for elliptic curve and Korteweg-de Vries equation, A-295.
CHOODNOVSKY, G. V. Many body problem with elliptic potentials and Burgers-Hopf equation, A-297.
---. See CHOODNOVSKY, D. V.
CHOW, Yutze. On algebras, manifolds and fibre-bundles in physics, A-572.
CHRISTENSEN, Mark J. and SHONKWILER, R. An age-dependent branching process of Waugh type with two phases, A-163; Lag time in microbe growth, A-189.
CHUAQUI, Rolando. Measures on qualitative probability σ-algebras, A-440.
CHUI, C. K. See BOROSH, I.
CHUKWU, Ethelbert Nwakuche. Absolute controllability of linear functional differential games of pursuit, A-247; Absolute controllability of nonlinear pursuit games. Preliminary report, A-296; On the boundedness of ordinary and hereditary systems of Lurie type, A-540; Controllability of delay systems with restrained controls, A-618.
CHUNG, F. R. K. On the decomposition of graphs. Preliminary report, A-627.
---. See BOLLOBAS, B.
CIBULSKIS, John M. Whitney numbers for FD(6). Preliminary report, A-42.
CIMA, Joseph A. and ROBERTS, James. Denting points in B^p, A-573.
CIMA, Joseph A. and WOGEN, Warren R. The extreme points of the unit ball of S_0. Preliminary report, A-80.
CIMENT, Melvyn, LEVENTHAL, Stephen H., WEINBERG, Bernard C., BERGER, Alan E. and SOLOMON, Jay M. Operator compact implicit schemes for parabolic equations. Preliminary report, A-505.
CLANCEY, Kevin. Operators with one dimensional

self-commutators, A-573.
CLARK, Bradd. Knot theories of the lens spaces, A-150; Crosscaps and knots. Preliminary report, A-262; Surgery on torus and cable links, A-397.
CLARK, Colin W. See MANGEL, Marc.
CLARK, Colin W., CLARKE, Frank H. and MUNRO, Gordon R. Problems of irreversible investment in renewable resource management, A-506.
CLARKE, Frank H. Two new methods in optimal control, A-489.
---. See CLARK, Colin W.
CLEAVER, C. and GIEL, C. Packing spheres in C_p spaces. Preliminary report, A-119.
COCHRAN, James A. and OEHRING, Charles. An analogue of the Hausdorff-Young theorem for integral operators, A-348.
COHEN, Frederick R. and HANDEL, David. k-regular embeddings of the plane, A-498.
COHEN, Gérard. See DEZA, Michel.
COHEN, Jo-Ann D. Locally bounded topologies on algebraic function fields. Preliminary report, A-277.
COHEN, M. See BERSTEIN, I.
COHEN, Miriam and ROWEN, Louis Halle. Rings with finite grade, A-416.
COHN, William S. Orthogonal complements to invariant subspaces of functions on multiply connected domains. Preliminary report, A-617.
COHOON, David K. An analysis of a singular integral equation of electromagnetic scattering. Preliminary report, A-581.
COLWELL, P. See BELNA, C.
COMER, Stephen D. Quasigroup representable CA_3's are not finitely axiomatizable, A-43.
COMERFORD, Leo P., Jr. Subgroups of small cancellation groups. Preliminary report, A-67.
COMSTOCK, Craig. See FAULKNER, Frank D.
---. See TAYLOR, James G.
CONJURA, Edward J. Solvable extensions of operators of monotone type. Preliminary report, A-307.
CONLAN, James Peter. Packing four-dimensional pennies using quaternions, A-491.
CONLON, Lawrence. See CANTWELL, John.
CONNELLY, Robert. A counterexample to the rigidity conjecture for polyhedra. Preliminary report, A-547.
---. See BERSTEIN, I.
CONWAY, E. D., HOFF, D. and SMOLLER, J. A. Asymptotic behavior of nonlinear reaction-diffusion systems, A-190.
CONWAY, John B. Which compressions of the shift are reflexive?, A-241; Every spectral picture is possible, A-431.
COOK, Thurlow A. Convergence of states on quantum logics. Preliminary report, A-314.
---. See BEAVER, O. R.
COOPER, Jeffery and STRAUSS, Walter. Scattering theory for a moving obstacle. Preliminary report, A-379.
COOTNER, Paul H. Stochastic optimization of natural resource use, A-489.
CORDOBA, Antonio. The multiplier problem for the polygon. Preliminary report, A-107.
CORDOBA, Antonio and FEFFERMAN, Robert. Some remarks about maximal theorems and multipliers, A-106.
CORWIN, Edward M. Rings of Euclidean type, A-46.
CORWIN, Lawrence. See GREENLEAF, F. P.
CORWIN, Lawrence and GREENLEAF, Frederick P. The Fourier transforms of certain distributions given by graphs of polynomials, A-483.
COSTA, D. L. See BREWER, J. W.
COSTELLO, Daniel J., Jr. Probabilistic decoding of convolutional codes. Preliminary report, A-184.
COX, J. Theodore. On one-dimensional diffusions ξ_s, $-\infty < s < \infty$, A-160.
COXETER, H. S. M. Tilings related to the quaternion group and the configuration 8_3, A-448.
CRANDALL, Michael G. and PAZY, A. On ranges of accretive operators, A-131.
CRANWELL, Robert M. and WEISS, Neil A. Limit theorems involving mixing stochastic point processes, A-165.
CRUSE, Allan B. Some analogues of the assignment polytope. Preliminary report, A-345.
CRYER, Colin W. and FETTER, Hans L. Numerical solution of the axisymmetric free boundary problem for a fully penetrating well, A-432.
CUADRADO, John L. Rational iterated integrals and formal power series connections. Preliminary report, A-138.
CUMMINGS, Larry J. See BEASLEY, LeRoy B.
CURRY, James H. Transition to turbulence in finite-dimensional approximations to the Boussinesq equations. Preliminary report, A-246.
CUSHING, J. M. Stability and instability criteria for Volterra integrodifferential systems. Preliminary report, A-637.
CUSHMAN, Richard and KELLEY, Al. Resonant Hamiltonian systems in Birkhoff normal form, A-639.
CUSICK, T. W. Integer multiples of periodic continued fractions. Preliminary report, A-290; Continuants with bounded digits, A-456.
DAFERMOS, C. M. Characteristics in hyperbolic conservation laws, A-98.
DAI, Taen-Yu. Exponential functions on partially ordered linear algebra, A-73.
DAILY, John D. Distribution of sequences of n-tuples modulo 1. Preliminary report, A-224.
DALE, Louis. The k-closure of monic and monic free ideals in a polynomial semiring, A-266.
DALEY, Robert P. Busy beaver sets and the degrees of unsolvability. Preliminary report, A-392.
DANKNER, Alan. Hyperbolic nonwandering sets in which the periodic points are not dense. Preliminary report, A-157.
D'ARCHANGELO, James. On the Whittaker differential equation and Laplace transforms, A-308.
DATTA, B. N. Matrix equation, polynomial matrix and the stability problem of discrete time system, A-181.
DAUBEN, Joseph W. Definition, consistency and ontology: The foundations of transfinite set theory, A-26.
DAUNS, John. Generalized monoform and quasi-injective modules, A-267.
DAVEY, B. A. and GOLDBERG, M. S. Varieties of p-algebras and double p-algebras as reflective subcategories of distributive lattices. Preliminary report, A-373.
DAVEY, B. A. and WERNER, H. Injectivity and Boolean powers, A-521.
DAVID, John E. On the valuations of a factor ring of a graded domain. Preliminary report, A-50.
DAVIDSON, Kenneth R. Commutative subspace lattices, A-534.
DAVIS, Burgess. On stopping times for n dimensional Brownian motion, A-336.
DAVIS, E. D. and MCADAM, S. Prime divisors and saturated chains, A-318.
DAVIS, Joel. Strong unicity using norm derivatives, A-482.
DAVIS, Martin and SCHWARTZ, J. T. Metamathematical extensibility for theorem verifiers, A-644.
DAVIS, S. W. On $\mathcal{J}_1$-spaces. Preliminary report, A-140.
DAVIS, Sheldon W. See BOONE, James R.
DAWSON, David F. Cesàro maps of variation spaces, A-101; Cesàro summability factors and a comparison of convergence rates, A-429; An addendum to "Matrix maps of null sequences", A-541.
DAY, Brian J. Note on linear monads, A-289; Note on Pontryagin duality, A-371.
DAY, Jane M. Compact semigroups with semilattice quotients that separate regular $\mathcal{D}$ classes, A-270.
DEBNATH, Lokenath. See CHATTERJEE, A. K.
DEBNATH, Lokenath, CHATTERJEE, Anadi Kumar and RAY, Sukomal Chandra. On the capillary-gravity wave problem in a running stream, A-176.
DE BOOR, Carl. Splines as linear combinations of B-splines, A-330; The approximation of functions and linear functionals: Best vs. good approximation, A-584.
deCESARE, Kenneth M. A codimension-two version of Novikov's theorem on foliations without limit cycles, A-353.
DEDDENS, James A. Subnormal operators and C^*-algebras, A-577.
DeGRYSE, Donald D. On the genus of a knot. Preliminary report, A-149.

de GUZMAN, Miguel. A method for the study of convolution operators. Preliminary report, A-533.
DEKKER, J. C. E. Sharply two-transitive families of permutations on an immune set, A-254.
de KORVIN, Andre. Convergence theorems for an integral on measures, A-14.
de KORVIN, Andre and THO, Vo Van. A Hellinger-Hahn decomposition theorem, A-14.
DE LUCA, Aldo. A property of finite prefix codes, A-247.
DEMARR, Ralph. A property related to ordered group algebras. Preliminary report, A-347.
DEMKO, Stephen. Interpolation by quadratic splines, A-104.
DENNIS, J. E. Nonlinear optimization, A-584.
DENNIS, R. K. See FULLER, R. J.
de PILLIS, John. Faster convergence for iterative solutions to systems via three-part splittings. Preliminary report, A-171; An inequality on ranks in sums of decomposable tensors, A-344.
DE ROOIJ, Alfred. Torus degree of symmetry of exotic spheres. Preliminary report, A-258.
DERR, Leroy. See SARAFYAN, Diran.
DERSHEM, H. L., McLAUGHLIN, D. E., SMITH, D. A. and ZIEBUR, A. D. A report on mathematics instruction and computing, A-186.
DESHPANDE, Vithal K. Semilocal rings and the Noetherian condition. Preliminary report, A-5.
DEUTSCH, Emeric. Diagonal dominance for partitioned matrices. Preliminary report, A-222.
DEVENEY, James K. and MORDESON, John. Inseparable field extensions. Preliminary report, A-626.
DeVORE, Ronald A., RIEMENSCHNEIDER, S. and SHARPLEY, R. Weak interpolation in Banach spaces, A-244.
DEVOS, Robert. Category of sequences of 0's and 1's in certain FK spaces, A-102.
DEZA, M. Perfect generalized packing as a common generalization of simple t-design and matroid-design, A-2.
---. See BLAKE, Ian F.
DEZA, Michel and COHEN, Gérard. On coding with permutation groups, A-420.
DIAMOND, Harold G. and ESSÉN, Matts. One-sided Tauberian theorems for kernels which change sign, A-103.
DIBNER, Steve. Genus-2 Heegaard splittings for certain 3-manifolds, A-150; An alternate method of finding certain link groups, A-338; Machine computation of certain link groups, A-501.
DICKMAN, R. F., Jr. and BELL, Harold. A counterexample to a conjecture of A. H. Stone, A-494.
DICKMAN, R. F., Jr., RUBIN, L. R. and PORTER, J. R. Projective spaces in the category of H-closed spaces and θ-continuous maps. Preliminary report, A-144.
DIEDERICH, James R. Uniqueness for the Neumann problem. Preliminary report, A-96.
DIESTEL, J. and SEIFERT, C. Operators with the Banach-Saks property, A-323.
DIMINNIE, C. and WHITE, A. Strict convexity in topological vector spaces. Preliminary report, A-121.
DINCULEANU, Nicolae. See BROOKS, James K.
DIXON, P. G. A lower bound for the L^1-norm of certain exponential sums, A-8.
DLAB, V. and RINGEL, C. M. The structure of tame hereditary algebras, A-58.
DOBBS, David E. Coherence, ascent of going-down, and pseudo-valuation domains, A-266; Weak global dimension of pseudo-valuation domains, A-372.
---. See ANDERSON, David F.
DOBBS, David E. and PAPICK, Ira J. Flat or open implies going down, A-226.
DOLAN, J. Michael. See KLAASEN, Gene A.
DOLAN, Kevin. See JONES, John, Jr.
DOMBROSKI, Michael. Finite analogues of trigonometric functions, A-533; An algebraic trigonometry, A-641.
DOMOKOS, G. On some algebraic problems in the theory of elementary particles, A-572.
DONAGHEY, Robert. Automorphisms on Catalan trees and bracketings, A-32.
DONALD, J. D. and FLANIGAN, F. J. The geometry of Rep (A, V) for a square-zero algebra. Preliminary report, A-416.
DOUGLAS, R. G. See ABRAHAMSE, M. B.
DOUGLAS, Robert J. Bounds on the number of Hamiltonian circuits in the n-cube, A-346.
DOUGLAS, Roy and BODY, Richard. Unique factorization for rational homotopy types and graded algebras, A-499.
DOWNES, Virginia L. Green polynomials of the finite symplectic group Sp(6, q), q odd. Preliminary report, A-422.
DOWNING, David and KIRK, W. A. Fixed point theorem for set-valued mappings in metric and Banach spaces, A-237.
DRAKE, David A. Constructions of Hjelmslev planes, A-31.
DRASIN, David. Two examples, A-579.
DUCHARME, Robert G. Elementary linear algebra for those who use a computer and for those who do not, A-186.
DUFF, G. F. D. Variation of a maximal function, A-332.
DUFFIN, R. J. The generalizations of analytic functions, A-99.
DUFFIN, R. J. and MORLEY, T. D. Almost definite operators and electro-mechanical systems, A-265; Inequalities induced by network connections, A-370.
DUFFUS, Dwight and RIVAL, Ivan. Decomposition and structure results for function lattices, A-40.
DUKARM, J. J. Weakly monadic Boolean extension functors. Preliminary report, A-419; Morita equivalence of algebraic theories. Preliminary report, A-611.
DUNKL, Charles F. Series of Hahn polynomials and their q-analogues, A-86.
DULA, Giora and KATZ, Elyahu. Computation of the homology of $\Omega(X_1 \vee X_2)$. Preliminary report, A-496.
DUPRE, Maurice J. The classification of C*-algebra bundles, A-311.
DURBIN, John R. Automorphisms and equivalence of functions over finite fields, A-458.
DUREN, Peter and SCHOBER, Glenn. Nonvanishing univalent functions. Preliminary report, A-579.
DURHAM, Stephen. See PEARCE, Lynn.
DURIS, C. S. Discrete spline approximations by summation matching. Preliminary report, A-103.
DURRETT, Richard. An infinite particle system with additive interactions, A-647.
DWYER, Thomas A. W. III. Fourier-Borel duality and bilinear realizations of control systems, A-182.
EAKIN, Paul, SHANNON, David and HEINZER, William. Ideal transforms of Neotherian integral domains. Preliminary report, A-321.
EARNEST, Andrew G. and ESTES, Dennis. Lifting spinor genera of binary quadratic lattices. Preliminary report, A-457.
EATON, William T., PIXLEY, Carl P. and VENEMA, Gerard A. A topological embedding which cannot be approximated by a piecewise linear embedding. Preliminary report, A-302.
EBERHART, Carl and WILLIAMS, Wiley. Semimodularity in lattices of congruences, A-65.
EBERLEIN, W. F. Solution of the first digit problem. I: Continuous case, A-504.
EBERT, Gary L. Maximal strictly partial spreads of PG(3, q). Preliminary report, A-37.
EDGAR, G. A. Measurability in a Banach space, A-116; Vector-valued amarts, A-324.
EDGAR, G. A. and SUCHESTON, L. Martingales in the limit and amarts, A-393.
EDGAR, Hugh M. Relative integral bases and class numbers. Preliminary report, A-8; Relative integral bases for algebraic number fields. Preliminary report, A-400.
EDMONDS, Allan L. See BERSTEIN, Israel.
EDREI, Albert. Distribution of the zeros of Padé polynomials of an entire function, A-328; The Padé tables of entire functions, A-579.
EDWARDS, Bruce H. The eigenvalues of four-dimensional rotations, A-227.
EDWARDS, Constance C. The structure of $\mathcal{L}$-unipotent semigroups, A-189; The greatest idempotent separating congruence on an $\mathcal{L}$-unipotent semigroup. Preliminary report, A-467.
EDWARDS, David A. Toward nonabelian algebraic topology, A-24.

EDWARDS, Robert D. Giffen's quick proof of the double suspension conjecture for certain homology 3-spheres, A-154; An amusing reformulation of the four color problem, A-257; Approximating certain cell-like maps by homeomorphisms, A-649.
EFROYMSON, Gus. Factorization of Nash functions on certain planar domains, A-53.
EHRENFEUCHT, A. and FABER, V. Proper embeddings. Preliminary report, A-40.
EHRLICH, Paul E. Stability subgroups for surfaces without conjugate points, A-298.
EHRLICH, Paul E. and HOF, H. C. Im. The geometry of the Dirichlet fundamental region, A-137.
EHRMANN, Rita M. (Sister). Two contemporary applications of finite geometries, A-187.
EIFRIG, Bernd. Atoms of time and extensive physical quantities. Preliminary report, A-535.
EISENBERG, S. Approximation by discrete Jackson-type operators. Preliminary report, A-306.
EISENBUD, David. An algebraic approach to the topological degree of a $C^{(1)}$ map, A-149.
EKLUND, Neil. Generalized parabolic functions using the Perron-Wiener-Brelot method. Preliminary report, A-94.
ELLENTUCK, Erik. Hyper-Torre isols. Preliminary report, A-253; Isolated fields. Preliminary report, A-390.
ELLIOTT, D. L. See KALOUPTSIDIS, N.
ELLIS, Martin H. Matching with Markov processes, A-164.
ELLIS, Richard S. Ferromagnetic measures and limit theorems for generalized Ising models, A-21.
ELOSSER, P. Douglas. Least-first-power (L-F-P) approximation by polynomials, A-10.
ENGL, Heinz W. A general stochastic fixed point theorem for continuous random operators on stochastic domains, A-273; A random fixed point theorem for nonexpansive mappings with stochastic domain, A-335; Random fixed point theorems for multivalued mappings, A-428.
ENGLAND, James W. Calculus/linear algebra in A.P.L., A-187.
ENRIGHT, Thomas J. On the construction and classification of Harish-Chandra modules. Preliminary report, A-648.
ENTRINGER, R. C. and SLATER, Peter J. k-critically n-connected graphs. Preliminary report, A-35.
EPHRAIM, Robert. Iso-singular loci and the cartesian product structure of complex analytic singularities, A-326.
EPP, Robert J. and FERGUSON, Thomas S. Remarks on take-away games and Dawson's game. Preliminary report, A-179.
ERDELYI, I. Operator-valued analytic functions with spectral decomposition properties, A-128.
ERDŐS, Paul. Recent problems and results in combinatorics and graph theory, A-625.
---. See BOROSH, I.
---. See BRILLHART, John.
---. See BURR, S. A.
ERDŐS, Paul and HOBBS, Arthur M. Hamiltonian regular graphs of moderate degree, A-39; Disjoint maximal independent sets of vertices in graphs, A-630.
ERDŐS, Paul, GALVIN, F. and KRIEGER, M. Factoring complete hypergraphs into factors with few cliques. Preliminary report, A-629.
ERNEST, John. The C*-algebra approach to the unitary equivalence problem for Hilbert space operators, A-129; Generalized spectra for Teoplitz operators, A-641.
ERNI, Wilhelm. On the time and tape complexity of hyper (1)-AFL's. Preliminary report, A-248.
ESSÉN, Matts. Slowly growing subharmonic functions, A-576.
---. See DIAMOND, Harold G.
ESTES, Dennis. See EARNEST, Andrew G.
ESTES, Dennis R. and MATIJEVIC, Jacob R. Matrix factorization, A-53.
ETGEN, Garret J. and LEWIS, Roger T. Oscillation of differential systems in Banach spaces, A-90.
EVANS, Benny and MAXWELL, Jim. Quaternion actions on S^3. Preliminary report, A-441.
EVANS, E. Graham, Jr. and GRIFFITH, Philip A. The Syzygy problem, A-320.
EVANS, Elliott L. The lattice of cosets of a tree. Preliminary report, A-234; Midpoint lattices. Preliminary report, A-421; Median algebras and lattices, a duality, A-526.
EVANS, Ronald J. Sixteenth power residue difference sets. Preliminary report, A-7.
EVERETT, D. L. Embedding theorems for decomposition spaces. Preliminary report, A-152.
EWING, John H. The image of the Atiyah-Bott map, A-633.
EZELL, Cloyd L. Normal extensions of curves in orientable surfaces. Preliminary report, A-150.
FABER, V. See EHRENFEUCHT, A.
FABOZZI, Frank J. See HASTINGS, Harold M.
FABREY, James D. Boolean matrices and a committee problem. Preliminary report, A-439.
FAITH, Carl. The injective local ring of a complete local ring, A-459.
FAJTLOWICZ, S. Independence ratio for cubic graphs, A-289.
FALKENBERG, Bernhard. Representing many-one degrees by monogenic Post normal systems. Preliminary report, A-251; Halting problems of tag-systems with arbitrary deletion number. Preliminary report, A-392.
FARMER, K. Bolling. On faithful irreducible projective representations. Preliminary report, A-304.
FARRELL, F. T. and HSIANG, W. C. Homotopy flat manifolds. Preliminary report, A-444.
FAULKNER, Frank D. and COMSTOCK, Craig. Statistical corrections to improve weather prediction, A-351.
FAULKNER, Gary D. and HUNEYCUTT, James E. Orthogonal decomposition of isometries in a Banach space, A-274; Translation invariant vector measures, A-534.
FAY, Temple H. and THOMAS, Barbara V. Smith. Graev free topological groups. Preliminary report, A-72.
FEFFERMAN, Robert. See CORDOBA, Antonio.
FEINBERG, Jerry M. The isoperimetric inequality for doubly-connected minimal surfaces in R^n, A-493.
FELDMAN, W. A. See PORTER, J. F.
FELDMAN, W. A. and PORTER, J. F. Generalized realcompactness, A-120.
FELLER, E. H. See BOYLE, Ann K.
FERGUSON, H. R. P. The arithmetic of the Khintchine map, A-46.
FERGUSON, Le Baron O. A problem in interpolation by integral polynomials. Preliminary report, A-105.
FERGUSON, Pamela A. On a problem of Frobenius. Preliminary report, A-369.
FERGUSON, Thomas S. See EPP, Robert J.
FESHBACH, Mark. The transfer and characteristic classes. Preliminary report, A-339.
FETTER, Hans L. See CRYER, Colin W.
FIALKOW, Lawrence A. Solving the operator equation AX - XB = Y, A-130; Unitary cross sections for Hilbert space operators. Preliminary report, A-423.
FIEDLER, M. and PTÁK, V. Diagonals of convex sets. Preliminary report, A-231; The rank of extreme positive operators on polyhedral cones. Preliminary report, A-288.
FIFE, James H. Triple products in the Steenrod algebra. Preliminary report, A-445.
FIFE, Paul C. The equations of reaction and diffusion, A-348.
FIGA'-TALAMANCA, Alessandro and PICARDELLO, Massimo A. Functions that operate on $B_0(G)$. Preliminary report, A-239.
FILIPPENKO, Ivan. See MARCUS, Marvin.
FINDLEY, David F. A time series has a (tenuously) convergent AR(∞) representation if an only if it has an MA(∞) representation, A-166.
FINE, Benjamin. Principal congruence subgroups of the Picard group, A-563.
FINK, John Frederick and STRAIGHT, H. Joseph. Path-perfect graphs, A-38.
FINKELSTEIN, Larry. See FROHARDT, Daniel.
FINN, Robert. Existence and nonexistence of capillary surfaces, A-581.
FINTUSHEL, Ronald and PAO, Peter. Identification of certain 4-manifolds with group actions, A-276.
FISHER, Edward R. Vopenka's principle, category theory, and universal algebra, A-44.
FISHER, J. C. A proof of Orr's theorem on the partition

of a sphere by plane sections. Preliminary report, A-135.
FISHER, Joe W. Finiteness conditions for rings with finite group actions. Preliminary report, A-377.
---. See ARMENDARIZ, E. P.
FISHER, Joe W. and MONTGOMERY, Susan. Semiprime skew group rings. Preliminary report, A-525.
FISK, Steve. Four colorings: Their existence and non-existence, A-562.
FITTING, Melvin. A model theoretic characterization of the Π^1_1 and the r.e. relations, A-390.
FITZGIBBON, William E., III. Abstract semilinear functional differential equations, A-88.
FITZPATRICK, William J. and GRIMM, Louis J. Convergent factorial series solutions of difference systems. Preliminary report, A-100.
FIX, George J. Variational methods for elliptic boundary value problems, A-585.
FLAHERTY, Frank. Wave surfaces in Lorentz-Minkowski space, A-138.
FLANIGAN, F. J. On an exponential diophantine equation in seven unknowns which reduces to the Catalan equation, A-229; Extreme ideal and radical embeddings, A-418.
---. See DONALD, J. D.
FLEISCHER, Isidore. The "word problem" for the semilattice tensor product of locally finite lattices. Preliminary report, A-421.
FLEISCHNER, Herbert. Compatible Euler trails and cycle coverings, A-626.
FLEISHMAN, B. A. and GINGRICH, Ross. Perturbation solution of a steady-state Stefan problem, A-98.
FLEURY, Patrick. On a class of idealizer rings. Preliminary report, A-526.
FOLDES, Stephane. The Chinese remainder theorem in automorphism groups of directed graphs, A-415.
FOLDES, Stephane and SINGHI, N. M. Regular representation of groups by hypergraphs, A-5.
FONG, Humphrey. Weak and strong convergence in L_p: A survey, A-74.
FORD, Jo and ROGERS, J. W., Jr. Refinable maps, A-23.
FORD, William F. See SMITH, David A.
FORNAESS, John Erik. See BEDFORD, Eric.
FORNBERG, Bengt. Pseudospectral calculations on nonlinear waves, A-643.
FORREST, Williams K. On the open topology, A-232; Mappings and correspondences of open formulas over integral domains, A-289; Upper and lower integration on algebraic manifolds in characteristic p. Preliminary report, A-377; The content of varieties, A-530; The topological and linear structure of the n-dimensional stone space of a field, A-608.
FOULSER, David A. and KALLAHER, Michael J. Solvable, flag transitive affine planes of low rank, A-134.
FOURMAN, Michael P. Approximation sheaves as internal Banach spaces. Preliminary report, A-244; A representation for internal sober spaces. Preliminary report, A-301.
FOX, David W. Bounds for perturbations of eigenvalues of relative hermitian matrix problems, A-322; The convexity of the range of three hermitian forms, A-462.
FRAENKEL, A. S. and YESHA, Y. Some NP-hard problems in combinatorial games and graph-theory. Preliminary report, A-33.
FRANCHETTI, C. and CHENEY, E. W. Orthogonal projections in spaces of continuous functions, A-104.
FRANCIS, George K. From Riemann surfaces to catastrophe machines. Preliminary report, A-333.
FRANCIS, Jack M. See HASTINGS, Harold M.
FRANK, Evelyn. Zeros of polynomials, A-331.
FRANK, Leonid S. Coercive singular perturbations. Preliminary report, A-25.
FRANKE, William T. Decomposing real C^∞ functions without enlarging supports. Preliminary report, A-122.
FREDERICKSON, P. O. Fast solution of generalized eigenvalue problems, A-172.
FREEDMAN, Allen R., RAPHAEL, Marc and SEMBER, John J. Some Cesàro type summability spaces. Preliminary report, A-379.
FREEDMAN, Marvin. See BERKEY, Dennis.
FREEDMAN, Michael H. Multiple points of an immersion. Preliminary report, A-354.
FREEMAN, J. W. Reguli and pseudo-reguli in $PG(3, s^2)$, A-135.
FREEMAN, Jim. See LASKAR, Renu.
FREY, G. Thomas. See ANDERSON, Patricia.
FRICKE, G. H. See McCALL, J. D.
FRICKE, G. H. and SHAH, S. M. Inequalities for entire functions of bounded index, A-540.
FRIDY, John. Minimal rates of summability. Preliminary report, A-101.
FRIEDMAN, Avner. The free boundary of a quasi-variational inequality, A-573.
---. See ANDERSON, Robert F.
FRIEDMAN, Emily P. Schemes and formal languages. Preliminary report, A-645.
FRIEDMAN, Eugene M. Improving the rate of convergence of power series solutions of differential equations, A-638.
FRIEDMAN, Sy D. Minimal α-degrees. Preliminary report, A-621.
FROHARDT, Daniel and FINKELSTEIN, Larry. Standard form problems in groups of characteristic 2-type. Preliminary report, A-71.
FRÖHLICH, J. Mathematical physics of phase transitions and symmetry breaking: New rigorous results, A-177.
FRYANT, Allan J. Interpolation and approximation of generalized axisymmetric potentials, A-309.
FU, Yen Tzu. A complete normed space $C^{\hat{n}}_{[a,b]}$. Preliminary report, A-310.
FUCHS, Wolfgang H. J. An inequality involving the absolute value of an entire function and the counting function of its zeros, A-324.
FULLER, Kent R. and HAACK, Joel. Rings with quivers that are trees, A-464.
FULLER, R. J. and DENNIS, R. K. Machine computation of Whitehead groups. Preliminary report, A-46.
FULP, R. O. and MARLIN, J. A. Involutive subgroups of function groups, A-156.
GAFFNEY, Terence and WILSON, Leslie. Uniqueness of normalization in the smooth category, A-568.
GALLIAN, Joseph A. Using the computer in an abstract algebra course, A-185.
GALPERIN, E. A. Robustness of asymptotic observers applied to unstable systems. Preliminary report, A-249; Nonasymptotically stable observers for linear time-invariant systems. Preliminary report, A-296.
GALVIN, Fred. On Gruenhage's generalization of first-countable spaces, A-22; On Gruenhage's generalization of first-countable spaces. II, A-257.
---. See ERDÖS, P.
GAMELIN, T. W. and SIBONY, N. Localization of subharmonicity with respect to a uniform algebra, A-486.
GANESAN, S. Some characterisations in Banach star algebras. Preliminary report, A-272.
GANSNER, Emden R. Enumeration of reverse and shifted reverse plane partitions via hook lengths. Preliminary report, A-38.
GARAVAGLIA, Steven. Elementary equivalence of modules. Preliminary report, A-551.
GARBANATI, L. F. Existence and uniqueness theorems for the linearized Boltzmann equation, A-476.
GARD, Thomas C. A generalization of the Nagumo uniqueness criterion. Preliminary report, A-90.
GARDNER, Robert B. Laplace invariants of hyperbolic P.D.E. Preliminary report, A-137.
GARFINKEL, Gerald S. Ring cores are pure subgroups, A-231.
GARLING, D. J. H. Convexity, smoothness and martingale inequalities, A-325.
GARNER, J. B. Some boundary value problems arising in physiology. Preliminary report, A-274.
---. See MOORTI, V. R. G.
GARNETT, John B. and JONES, Peter W. The distance in BMO to L^∞. Preliminary report, A-487.
GARRETT, B. D. Functions which jump no arcs and an erroneous argument, A-144.
---. See GIBSON, R. G.
GASPER, George and TREBELS, Walter. Multiplier criteria for Jacobi expansions and Hankel transforms, A-105.
GATTESCHI, Luigi and VINARDI, Giuliana. The degree of exactness of Chebyshev's quadrature formulas, A-388.

GAY, C. D., MORRIS, G. C. and MORRIS, I. Adams operations on the Burnside ring of a finite group, A-529.
GBUR, Mary E. The asymmetric Markoff spectra, A-45.
GEARHART, Larry. Spectral theory for contraction semigroups on Hilbert space, A-126.
GELLAR, Ralph. See CAMPBELL, Stephen L.
GEMAN, Stuart A. Stochastic differential equations with smooth mixing processes and applications. Preliminary report, A-256.
GENDLER, Alan M. An interesting weak* continuous function, A-121.
GEOGHEGAN, Ross. Compacta having the homotopy type of finite complexes, A-500.
GERASCH, Thomas E. On accessibility of boundary points of a simply connected domain. Preliminary report, A-79.
GERHARD, J. A. Free products of idempotent semigroups, A-290.
GERTH, Frank, III. Structure of A-class groups of certain number fields and $\mathbb{Z}_\ell$-extensions, A-48.
GESSEL, Ira M. Counting permutations by descents, inversions, and greater index. Preliminary report, A-36.
GEWAND, Marlene E. Lindelöf degree of the G_δ topology. Preliminary report, A-143.
GHOSH, B. K., TRUTT, D. and RHOADES, B. E. Subnormal generalized Hausdorff operators, A-14.
GHOUSSOUB, N. and SUCHESTON, L. A refinement of the Riesz decomposition for amarts and semiamarts, A-554.
GIARDINA, Charles R. On the sampling rate for cardinal series representations, A-310.
GIARDINA, Charles R. and KUHL, Frank P. The vector of maximum harmonic content with elliptical locus in Chebychev approximations, A-313.
GIBBONS, Joel C. A characterization of linear relations, A-582.
---. See WEBB, Cary.
GIBBONS, Joel C. and WEBB, Cary. A characterization of inversive groups of spheres, A-332.
GIBBONS, Ned M. A parameter estimation method based on regression analysis. Preliminary report, A-275.
GIBSON, Peter M. Real permanental roots of doubly stochastic matrices, A-271.
GIBSON, R. G. and GARRETT, B. D. Darboux at a point. Preliminary report, A-143.
GIEL, C. See CLEAVER, C.
GILES, Robin. Continuous lattices in the foundations of physics, A-278.
GILFEATHER, Frank. Norm conditions on resolvents of similarities of Hilbert space operators and applications, A-379.
GILL, Tepper L. A new approach to the operator disentanglement problem, A-126.
GILLMAN, David. On localizing Dehn's lemma. Preliminary report, A-352.
GILMER, Robert and HEINZER, William. The Noetherian property for quotient rings of infinite polynomial rings. Preliminary report, A-629.
GINGRAS, Armando R. Complete distributivity and order convergence, A-269.
GINGRICH, Ross. See FLEISHMAN, B. A.
GINSBURG, John. L-spaces in complete spaces of countable tightness using $\diamondsuit$, A-394.
---. See BROVERMAN, S.
GIRSE, Robert D. See CHAWLA, L. M.
GISLASON, Gary A. Approximation by products of continuous functions. Preliminary report, A-480.
GIVANT, Steven and TARSKI, Alfred. Peano arithmetic and the Zermelo-like theory of sets with finite ranks, A-437.
GLANC, Alois. On classes of recursive languages. Preliminary report, A-551.
GLASSEY, Robert T. Asymptotic behavior of solutions to certain nonlinear Schroedinger-Hartree equations. Preliminary report, A-12; On the blowing-up of solutions to nonlinear Schroedinger equations. Preliminary report, A-237.
GLAZER, Steven. Some ultrafilter constructions using Martin's axiom. Preliminary report, A-316.
GLOBEVNIK, J. The ranges of analytic functions with continuous boundary values, A-383.
GOEL, V. K. A study of cotorsion theory, A-58.
GOES, Günther. Multipliers between Lipschitz spaces. Preliminary report, A-106.
GOETHALS, J.-M. Codes and t-designs over nonbinary alphabets, A-183.
GOLDBERG, Don. See BOGART, Ken.
GOLDBERG, M. S. See DAVEY, B. A.
GOLDBERG, Michael. On the convex polyhedral space-fillers. Preliminary report, A-489.
GOLDBERG, Moshe. Some inclusion relations for c-numerical ranges, A-343.
GOLDBERG, Moshe and STRAUS, E. G. On norm properties of the C-numerical radius. Preliminary report, A-5.
GOLDFEATHER, Jay E. Incompressible maps, A-339.
GOLDSCHMIDT, Hubert. The integrability problem for Lie equations, A-154.
GOLDSMITH, Donald L. See CHARTRAND, Gary.
GOLDSTEIN, Alan A. See CHANEY, Robin.
GOLDSTEIN, Jerome A. Improvements in the Hardy-Landau-Littlewood inequality. Preliminary report, A-191.
GOLDSTINE, Jonathan. Formal languages, automata, and mathematical elegance, A-644.
GOLOMB, Solomon W. Tiling patterns and unusual rep-tiles, A-452; Explicit twin prime formulas, A-457.
GONZALEZ, Mario O. Area theorems for nonanalytic univalent functions, A-330.
GOODAIRE, Edgar G. The centralizer of a Cartan subalgebra of a Jordan algebra, A-2.
GOODMAN, A. W. The domain covered by a typically-real function, A-77.
GOODMAN, Victor. Asymptotic behavior of certain exit probabilities for vector-valued symmetric random walk and Brownian motion, A-336.
GOPAL, K. See KAPOOR, G. P.
GOPINATH, B. and KURSHAN, R. P. Every T-space is isomorphic to a T-space of continuous functions, A-478.
GORDH, G. R., Jr. and HUGHES, C. B. On freely decomposable mappings of continua, A-394.
GORDH, G. R., Jr. and LUM, Lewis. A mapping characterization of smoothness in continua, A-145.
GORDON, Jean. See BOGART, Ken.
GORDON, Jean and BOGART, Kenneth. Enumeration of nonisomorphic hypergraphs. Preliminary report, A-450.
GORDON, Sheldon P. A discrete approach to the calculus. Preliminary report, A-185.
GORENSTEIN, Daniel and LYONS, Richard. Odd standard form in groups of characteristic two type. Preliminary report, A-70.
GOTH, John A. Wreath products with supersolvable automorphism groups. Preliminary report, A-64.
GOTTLIEB, Allan. See KOHN, Samuel.
GOULD, H. W. Some formulas for Euler's constant, A-226.
GOULD, H. W. and GREIG, W. E. A Lucas triangle primality criterion dual to that of Mann-Shanks, A-231.
GRABINER, Sandy. Operators with eventually uniform ascent and descent, A-127.
GRAEF, John R. A nonoscillation theorem for an nth order nonlinear equation, A-273.
GRAEF, John R. and SPIKES, Paul W. Comparison and nonoscillation of perturbed nonlinear differential equations, A-91; Nonoscillation criteria for a nonlinear differential equation, A-474; A counterexample to a theorem of Wong, A-631; On the nonoscillation of perturbed nonlinear differential equations, A-631.
GRAHAM, George P., Jr. The incidence function in planes of prime power order, A-298.
GRAHAM, Ronald L. Combinatorial scheduling theory, A-355; On partitions of the plane. Preliminary report, A-449.
---. See BOLLOBAS, B.
---. See BURR, S. A.
GRANOFF, Barry. See BERKEY, Dennis.
GRASSL, R. M. See HILLMAN, A. P.
GRÄTZER, G. and KELLY, D. Free $\mathfrak{m}$-products of lattices. I. Notation, A-1; Free $\mathfrak{m}$-products of lattices. II. The structure theorem, A-221; Free $\mathfrak{m}$-products of lattices. III. Applications, A-287; On the product of lattice varieties, A-526.
GRÄTZER, G. and LAKSER, H. On the lattice of quasi-varieties of lattices, A-221.

GRÄTZER, G. and PADMANABHAN, R. Median algebras, A-527.
GRÄTZER, G. and PLATT, C. R. A characterization of sharply transferable lattices, A-228; Two embedding theorems for lattices, A-288.
GRÄTZER, G., PLATT, C. R. and SANDS, B. Lattice ideal embedding theorems, A-527.
GRAVES, Glenn W. See BROWN, Gerald G.
GRAVES, Larry. On isometric immersions between indefinite Euclidean spaces. Preliminary report, A-547.
GRAVES, Larry and NOMIZU, Katsumi. On sectional curvatures of indefinite metrics. Preliminary report, A-389.
GREECHIE, Richard J. On generating distributive sublattices of orthomodular lattices, A-41.
GREENBERG, James M. Pattern formation and periodic structures in systems modeled by reaction-diffusion equations, A-476.
GREENBERG, James M. and HASTINGS, S. P. Spatial patterns for discrete models of diffusion in excitable media, A-100.
GREENBERG, William. A class of transport type equations, A-177.
GREENE, Curtis. A theorem on perfect graphs, A-38.
GREENLEAF, Frederick P. See CORWIN, Lawrence.
GREENLEAF, Frederick P., CORWIN, L. and PENNEY, R. Canonical formulas for multiplicities and primary projections in L^2 of a nilmanifold, A-468.
GREIG, W. E. See GOULD, H. W.
GRESSANG, R. See JONES, J., Jr.
GRIERZ, Gerhard. Continuous lattices in analysis, A-273.
GRIFFEATH, David. Some simple discrete-time dual processes, A-158.
GRIFFITH, Philip A. See EVANS, E. Graham, Jr.
GRIGGS, Jerrold R. Sufficient conditions for a symmetric chain order, A-42.
GRILLET, P. A. All semigroups with $S/\mathcal{P} = S/\mathcal{L} = \mathbb{N}$, A-63.
GRIMM, Louis J. See FITZPATRICK, William J.
GRINSTEIN, Georges G. Generalized Dirichlet series with complex exponents, A-631.
GRISPOLAKIS, J. and TYMCHATYN, E. D. Confluent images of arclike rational continua, A-258; On the existence of arcs in rational continua. Preliminary report, A-441; Confluent mappings and acyclicity of Hausdorff continua. Preliminary report, A-555; σ-connectedness in hereditarily locally connected spaces, A-622.
GROEMER, H. Multiple tilings of euclidean space, A-492.
GROETSCH, C. W. and KING, J. T. Extrapolation and the method of regularization for generalized inverses, A-432.
GRONE, Robert. Decomposable tensors as a quadratic variety, A-343.
GRONSKI, Jan M. Controllability on compact connected manifolds. Preliminary report, A-132.
GROSSBERG, Stephen. Serial codes for short term memory and long term memory. Preliminary report, A-18; The self-organization of sensory-motor maps and circular reactions. Preliminary report, A-246; Competition, decision, and consensus. Preliminary report, A-296; Decisions, patterns, and oscillations in nonlinear competitive systems with applications to Volterra-Lotka systems. Preliminary report, A-536.
GROSSMAN, Jerrold W. On groups with specified lower central series quotients, A-321.
GROSSMAN, Marvin W. Boundary measures and dilations for certain projection operators. Preliminary report, A-244.
GRUENHAGE, Gary. A note on spaces having an orthobase or a base of subinfinite rank, A-23.
---. See BOONE, James R.
GRÜNBAUM, B. and SHEPHARD, G. C. Classifications of plane patterns, A-490.
GRUNBAUM, F. Alberto. Inverse Eigenvalue problem for random matrices, A-305.
GUASPARI, David. Partially conservative extensions of arithmetic, A-29.
GUCCIONE, S. J. and STANOJEVIĆ, Č. V. Transition probabilities and inner products, A-117.
GUGGENHEIMER, H. Nonoscillation of certain fourth order linear differential equations, A-540.
GULLIVER, Robert. Finiteness of the number of minimal surfaces bounded by a given curve. Preliminary report, A-575.
GUMM, H. Peter. A cancellation theorem for finite algebras, A-530; Solution sets of equations over universal algebras. Preliminary report, A-610.
GUNDERSEN, Gary. The semigroup generated by anharmonic oscillators, A-429.
GUPTA, Ram Niwas. Other two roots of a normal cubic, A-418.
GUPTA, Ram Niwas and RAM, Jai. The Jacobson radical of fixed ring of automorphisms, A-528.
GURAK, Stanley J. Classical analogue of the relative genus theory of algebraic number fields, A-50.
GUREL, Okan. Decomposed partial peeling, A-317.
GUREVICH, Yuri and SHELAH, Saharon. Modesty 1, A-20.
GUSTAFSON, John L. A fast-convergence infinite product for $\Gamma(z)$, A-430.
HAACK, Joel. See FULLER, Kent R.
HADA, Dennis. See YODER, Lane.
HAGHANY, A. Simple Ore extensions of some commutative rings, A-465.
HAGOPIAN, Charles L. Homogeneous circle-like continua that contain pseudo-arcs, A-141.
HAHN, Marjorie G. A characterization of the Kolmogorov difference property and its relationship to the central limiting behavior of square-integrable stochastic processes, A-337.
HAIFAWI, Mahmoud. Nonstandard theory in nonarchimedean analysis. Preliminary report, A-240; Complementation property in nonarchimedean normed spaces, A-536.
HAILPERIN, Theodore. Boole's algebra isn't Boolean algebra, A-26.
HÁJEK, Petr. Another sequence of degrees of constructibility. Preliminary report, A-299.
---. See BALCAR, B.
HALE, Mark, Jr. Partial geometries with reasonable local structure. Preliminary report, A-135.
HALES, Alfred W. Presentations of Boolean algebras. Preliminary report, A-453.
HALEY, David K. Compactness in discriminator varieties. Preliminary report, A-227; Injectives in discriminator varieties. Preliminary report, A-418.
HALKIN, Hubert. Set-valued differentials and optimization theory, A-347.
HALL, L. M. A solvability criterion for nonhomogeneous Bessel equations, A-88.
HALL, William S. A Rayleigh wave equation, A-381; The Rayleigh and Van der Pol wave equations, some generalizations, A-617.
HALPERIN, Stephen and STASHEFF, James. Obstructions to homotopy equivalences. Preliminary report, A-499.
HALPERN, Fred. An application of Scott's interpolation theorem, A-30.
HAMANN, Eloise A. On cancellation. Preliminary report, A-320.
HANDEL, David. See COHEN, Frederick R.
HANF, William P. The Boolean algebra of formulas with one free variable. Preliminary report, A-447; Using tilings to construct first-order theories. II. Preliminary report, A-451.
HANKINS, J. C. and RAKESTRAW, Roy M. Convex cones and dentability, A-117.
HANKS, Christopher. See BARRATT, Michael.
HANSEN, Eldon. Global optimization using interval analysis. Preliminary report, A-347.
HANSEN, Lowell J. Some geometric aspects of the growth of entire functions, A-577.
HARARY, Frank and MELTER, Robert A. On the metric dimension of a tree, A-31.
HARBIN, Mickie S. See BEARD, Jacob, T. B., Jr.
HARBORTH, Heiko. Prime number criteria in Pascal's triangle, A-521; Prescribed numbers of tiles and tilings, A-619.
HARDT, Robert M. On boundary regularity for two dimensional flat chains modulo two minimizing the integral of an elliptic integrand in R^3, A-132.
HARER, John L. See CASSON, Andrew J.

HARNIK, V. and MAKKAI, M. Some proof theory for generalized quantifiers, A-435.
HARTEN, A. See LAX, Peter D.
HARTIG, Donald. Pseudocompactness and local connectedness in completely regular spaces, A-145.
HASTINGS, Harold M., FRANCIS, Jack M. and FABOZZI, Frank J. A model for bankruptcy using catastrophe theory, A-387.
HASTINGS, S. P. See GREENBERG, J. M.
HASTINGS, William. On $H^2(\mu)$ for μ a pure atomic measure. Preliminary report, A-580.
HATCHER, John R. Closed form solutions of a nonlinear Hilbert problem. Preliminary report, A-81.
HAUSKNECHT, Adam O. Coabelian cosemigroups of the category of rings. Preliminary report, A-61.
HAYMAN, W. K. See BARTH, Karl F.
HAYS, John. Logical clustering algorithm for medical diagnostics, taxonomy, general systematics. Preliminary report, A-434; A vector (ordinal) switching algebra as conservative extension of present scalar (typological) switching algebra. Preliminary report, A-619.
HEAD, Tom. See ANDERSON, James A.
---. See BLATTNER, Meera.
HEATH, Larry F. Weighted deficiency of meromorphic functions. Preliminary report, A-84.
HEATH, Robert W. and LINDGREN, William F. A note on semiparacompact spaces. Preliminary report, A-636.
HEDSTROM, G. W. Outflow boundary conditions for nonlinear hyperbolic systems, A-643.
HEDSTROM, John R. and HOUSTON, Evan G. Pseudo valuation domains. Preliminary report, A-267.
HEIL, Wolfgang and TOLLEFSON, Jeffrey. Deforming a homotopy-involution of a 3-manifold to an involution, A-397.
HEINZER, William. See EAKIN, Paul.
---. See GILMER, Robert.
HEISEY, Richard E. Factoring open subsets of R^{ω} with control. Preliminary report, A-303; Stability with control for Q^{ω} manifolds. Preliminary report, A-560.
HEITSCH, James L. Foliations with nontrivial secondary classes, A-633.
HEJHAL, Dennis A. Monodromy groups and Poincaré series, A-83.
HELLER, Alex. Topology of discrete groups, A-500.
HELLERSTEIN, Simon and WILLIAMSON, Jack. Derivatives of entire functions and a conjecture of Pólya and Wiman, A-327.
HELTON, J. William. The distance of a function to H^{ω}; electrical power transfer, A-640.
HELTON, Jon. See STUCKWISCH, Stephen.
HENSON, C. Ward. See BECKER, Joseph.
HENTZEL, Irvin Roy. Ideals of right alternative rings, A-62.
HERBST, Ira W. Unitary equivalence of Stark hamiltonians, A-117.
HERMANN, Robert. Some neglected features of Sophus Lie's work, A-26.
HEROD, James V. Product integral representation of the generalized inverse for closed operators. Preliminary report, A-128.
HERRERO, Domingo A. Quasi-similar operators with different spectra. Preliminary report, A-11; Examples of strictly weighted shifts, A-616.
---. See BARRIA, Jose.
HERRMANN, Robert A. Perfect maps and convergence spaces, A-139; Point monads and P-closed spaces, A-397.
HERSH, Reuben. Higher-order approximations for C_0 semigroups, A-387; Higher-order approximations for C_0 semigroups. II, A-546.
HESTENES, Magnus. A role for augmentability in optimization theory. Preliminary report, A-348.
HICKIN, Kenneth K. Complete universal locally finite groups, A-231; Complete universal homogeneous groups. Preliminary report, A-288.
HICKIN, Kenneth K. and PHILLIPS, R. E. Infinite periodic groups, A-232.
HICKS, Troy L. and HUFFMAN, Ed. W. Fixed point theory in generalized Hilbert spaces, A-114.
HICKS, Troy L. and HUFFMAN, Shirley M. A note on locally quasi-uniform spaces, A-141.
HICKS, Troy L. and KUBICEK, John D. Nonexpansive mappings in locally convex spaces, A-118.
HIGGINS, P. J. See BROWN, R.
HILDEBRANDT, S. On 't Hooft's eigenvalue problem in two-dimensional quantum chromodynamics, A-578.
HILE, G. N. See BEAR, H. S.
HILGERS, John W. A method for finding the optimal regularization parameter. Preliminary report, A-485.
HILL, Theodore P. On the existence of good Markovian strategies. Preliminary report, A-163.
HILLER, Howard L. and SHELAH, Saharon. Ext in L. Preliminary report, A-316.
HILLMAN, A. P. and GRASSL, R. M. Functions on tableau frames, A-636.
HILLMAN, Jonathan A. A nonhomology boundary link with Alexander polynomial 0. Preliminary report, A-257; High dimensional knot groups which are not 2-knot groups, A-301.
HILTON, Peter. On co-H-spaces, A-496.
HINDMAN, Neil and TAYLOR, Alan D. On repeating sums and small cells. Preliminary report, A-34.
HIREMATH, V. A. On copure injective modules, A-611.
HIRSCHMAN, Isidore I., Jr. Spherical multipliers. Preliminary report, A-108.
HIRSCHMAN, Isidore I., Jr. and LIANG, David S. Szegö's theorem on SU(3). Preliminary report, A-329.
HIRSCHORN, R. M. Invertibility of control systems on Lie groups, A-182.
HIRSHON, Ronald. The equivalence of $X^{\dagger}C \approx X^{\dagger}D$ and $JXC \approx JXD$. Preliminary report, A-525.
HITT, L. R. and SUMNERS, D. W. Knots which are uniquely determined by their complements, A-634.
HO, Chung-wu. On the space of the linear homeomorphisms of a 2-disk with two interior vertices. Preliminary report, A-151.
HOBBS, Arthur M. See ERDÖS, P.
HOCHBERG, Kenneth J. A signed measure on path space related to Wiener measure, A-503.
HOCHSTER, Melvin. Canonical elements in local cohomology modules. Preliminary report, A-319; Cohen-Macaulay modules. Preliminary report, A-459.
HOF, H. C. Im. See EHRLICH, Paul E.
HOFF, D. See CONWAY, E. D.
HOFFMAN, William C. A mathematical model of Piagetian psychology, A-18; Holonomy in psychology. Preliminary report, A-180.
HOFMANN, Karl H. and MISLOVE, Michael. Is the lattice of kernel operators of a continuous lattice continuous?, A-4.
HOFMANN, Karl H. and THAYER, F. Javier. On the spectrum of approximately finite dimensional C*-algebras, A-114.
HOGGATT, V. E., Jr. and BICKNELL-JOHNSON, M. Reflections in three glass plates. Preliminary report, A-450.
HOLLAND, Charles J. Stochastically perturbed limit cycles, A-503.
HOLLINGSWORTH, Mark. Typically real functions of order p. Preliminary report, A-83.
HOO, Cheong S. Principal and induced fibrations, A-497.
HOOVER, Douglas N. Probability logic. Preliminary report, A-438.
HOPPENSTEADT, Frank C. On the optimal exploitation of a spatially distributed fishery, A-509.
HORNE, J. G. On the automorphism group of a cone, A-136.
HOROWITZ, David A. A further refinement for coefficient estimates of univalent functions. Preliminary report, A-381.
HOUSTON, Evan G. Chains of primes in $R\langle x \rangle$. Preliminary report, A-267.
---. See HEDSTROM, John R.
HOWARD, Paul E. Some strong forms of the Boolean prime ideal theorem. Preliminary report, A-446.
HOWARD, Paul E., RUBIN, Arthur L. and RUBIN, Jean E. Independence results for class forms of the axiom of choice, A-391.
HOWORKA, Edward. Generators for algebras of relations. Preliminary report, A-4; A characterization of distance-hereditary graphs, A-227; On metric properties of certain clique graphs, A-291.
HSIANG, W. C. See FARRELL, F. T.

HSIAO, George C. Singular perturbation of an exterior Dirichlet problem, A-97.
HU, T. C. Some results in network theory. Preliminary report, A-644.
HUCKABA, James. See ANDERSON, D. D.
HUFF, Barthel W. Mixtures that cannot be infinitely divisible. Preliminary report, A-161; Maxima and infinite divisibility, A-503.
HUFFMAN, Ed. W. See HICKS, Troy L.
HUFFMAN, Shirley M. See HICKS, Troy L.
HUFFMAN, W. Cary. Polynomial invariants of finite linear groups of degree 2, A-70.
HUGGINS, Frank N. Generalized Lipschitz conditions. II, A-295.
HUGHES, C. B. See GORDH, G. R., Jr.
HUGHES, Daniel R. Biplanes, A-33.
HULKOWER, Neal D. Application of the stable manifold theorem to the zero energy three body problem. Preliminary report, A-174.
HUMI, Mayer. Invariant solutions for a class of diffusion equations, A-174.
HUNEKE, Phil. Smooth tesselations of a sphere (à la Betty Collings) and other surfaces. Preliminary report, A-501.
HUNEYCUTT, James E. See FAULKNER, Gary D.
HUNG, H. H. A contribution to the theory of metrization, A-22; Strengthening of Frink's metrization theorem, A-263; A characterization of local bases, A-445; Metric, symmetric, asymmetric, A-557; An alternative to Bing's generalization of Urysohn's metrization theorem, A-622.
HUNT, Richard A. Harmonic measure and estimates of Green's function, A-331.
HURD, A. E. Nonstandard models in nonequilibrium statistical mechanics. Preliminary report, A-506.
HUTCHINSON, Joan P. See ALBERTSON, Michael O.
HUTCHINSON, John E. A measure of De Giorgi and others does not equal twice Hausdorff measure. Preliminary report, A-240.
HYERS, D. H. Bounds for polynomial operators and their Frechet derivatives, A-488.
HYMAN, J. M. See LAX, Peter D.
ILAMED, Yehiel. On polynomials orthogonal with respect to the trace bilinear form. II, A-368; Lie elements, the Killing form and trace identities, A-420.
INFANTE, Ronald P. Strong normality and normality in difference algebra, A-48.
INFANTOZZI, Carlos A. On bi-quaternion integers: "Lattice of Hankelian near-rings with units", A-562.
INGRAM, W. T. Hereditarily indecomposable tree-like continua. II. Preliminary report, A-636.
INSELBERG, Alfred. On determinants of Toeplitz-Hessenberg matrices arising in power series, A-15; Quasi-three-chambered model of the cochlea (inner ear) at low frequencies, A-180.
IRLBECK, B. William. Finitely generated projective ideals in commutative rings, A-460.
IRVING, Ronald S. Prime ideals of Ore extensions. Preliminary report, A-57.
ISEKI, Kiyoshi. On contractive mappings. Preliminary report, A-140.
ISMAIL, Mourad E. H. Evaluation of certain integrals with application to probability theory and special functions, A-85; Bessel functions, Stieltjes transforms and infinite divisibility, A-382.
ISMAIL, Mourad E. H. and MULDOON, Martin E. Monotonicity of the zeros of a cross-product of Bessel functions, A-86.
IVANOV, Simeon. Holomorphic relative inverses, A-538.
JACKSON, Bill. Hamilton cycles in 2-connected regular graphs. Preliminary report, A-523.
JACO, William and MYERS, Robert. An algebraic characterization of closed-3-manifolds, A-263.
JACOBOWITZ, Howard. Induced connections on hypersurfaces, A-137.
JACOBSON, Elaine M. A characterization of the weakly almost periodic functions. Preliminary report, A-121.
JAIN, R. K. On multiplication modules, A-415.
JAIN, S. K. and MOHAMED, Saad. Rings whose cyclic modules are continuous, A-8.
JAJODIA, ...shil. On 2-dimensional CW complexes with a single 2-cell, A-496.
JAKIMOVSKI, A. See BORWEIN, D.
JAMES, David M. Smooth free circle actions on 9-spheres. Preliminary report, A-259.
JAMES, Robert C. Nonreflexive Banach space of type 2, A-534.
JAMISON, Benton. Doeblin's theory of Markov processes: a historical survey, A-160.
JAMISON, Robert E. Coaffine geometry and convexity over finite fields, A-492; Tietze's convexity theorem for semilattices and lattices, A-520; Isometries of k-subsets of a set. Preliminary report, A-608.
JANOS, Ludvik. Dimension theory via bisector-chains, A-23; Uniform asymptotic stability and equi-continuity of dynamical systems, A-87; A linearization of continuous semiflows in the Hilbert space l_2, A-276; Fixed point property and even continuity, A-302; Dimension theory via reduced bisector-chains, A-494; The language of inequality and topological properties, A-551; A measure of validity, A-620.
JANOS, Ludvik and MARTIN, Harold. Metric characterizations of dimension for separable metric spaces, A-634.
JANOS, Ludvik and SOLOMON, J. L. A fixed point theorem for operators with a compact iterate, A-260.
JANOWITZ, M. F. Complemented congruences on complemented lattices, A-304.
JATEGAONKAR, Arun V. Jacobson's conjecture and bimodules over Noetherian rings. Preliminary report, A-465.
JECH, Thomas. A Boolean algebraic game, A-507.
JEFFERS, Errol A. The amalgamation property in universal Horn classes of digraphs. Preliminary report, A-522; The Vaught conjecture for universal Horn theories of one binary relation. Preliminary report, A-620.
JENKINS, Terry L. See OLSON, Dwight M.
JEROSLOW, Robert G. Cut form for binary variables. Preliminary report, A-544.
JERRI, A. J. Computations of the Hill functions of higher orders, A-19; Towards a discrete Hankel transform and its applications, A-112.
JETER, Melvyn W. Some extremal elements of the convex cone of monotone processes of concave type. Preliminary report, A-297.
JEWELL, Nicholas P. Multiplication by the coordinate functions on the sphere in $\mathbb{C}^n$ and the Bergman spaces. Preliminary report, A-488.
JITTORNTRUM, Krisorn. An implicit function theorem, A-615.
JOCKUSCH, Carl G., Jr. and POSNER, David. Double jumps of minimal degrees, A-254.
JOHNSON, David L. and LAHR, Charles D. Multipliers and derivations of Hilbert algebras, A-566; Multipliers of L^1-algebras with order convolution, A-566.
JOHNSON, Frederick C. A model for salmon fishery management. Preliminary report, A-510.
JOHNSON, Gordon G. Moments and differential equations. Preliminary report, A-273.
JOHNSON, Guy, Jr. See ARSOVE, Maynard.
JOHNSON, Johnny A. Prime sequences in local Noether lattices. Preliminary report, A-42.
JOHNSON, Jon L. Modules injective with respect to primes. Preliminary report, A-319.
JOHNSON, L. W. See RIESS, R. D.
JOHNSON, N. L. and OSTROM, T. G. Translation planes of characteristic two in which all involutions are Baer, A-133; The translation planes of order 16 that admit PSL(2, 7), A-490.
JOHNSON, William B. Symmetric structures in Banach spaces, A-486.
JOHNSTON, Katherine. Congruence lattices of Rees matrix semigroups, A-291.
JONES, Alan. See BRONSON, Richard.
JONES, Charles A. See LAHR, Charles D.
JONES, J., Jr., LEUTHAUSER, J. and GRESSANG, R. Solutions of the Riccati matrix differential equation. Preliminary report, A-94.
JONES, John, Jr., LUKES, John W. and DOLAN, Kevin. On kinematic similarity of systems of differential equations. Preliminary report, A-474.
JONES, L. W., Jr. Free semilattices. Preliminary report, A-269.

JONES, Peter W. See GARNETT, John B.
JONES, Roger L. An analog of the Marcinkiewicz integral in ergodic theory. Preliminary report, A-164.
JONES, Wayne R. The 1-cohomology of some finite "twisted groups" of Lie type. Preliminary report, A-71.
JORDAN, James, WALCH, Ray and WISNER, Robert. On triangles with integer sides, A-450.
JORDAN, James H. The genesis and development of poor mental visualization. Preliminary report, A-184.
JOSHI, C. M. See VERMA, A.
JOY, Kenneth I. A description of the topology on the dual space of a nilpotent Lie group. Preliminary report, A-557.
JUNEJA, Pushpa. See YADAV, B. S.
JURDJEVIC, Velimir. Controllability of bilinear systems, A-315.
JURKAT, W. and TROUTMAN, J. A general maximal inequality of the Hardy-Littlewood type. Preliminary report, A-73.
KAINEN, Paul C. and WHITE, Arthur T. On stable crossing numbers, A-33.
KAISER, Klaus. On relational selections for complete theories, A-446.
KALABA, R. and ZAGUSTIN, E. A new representation and method for solution of Fredholm integral equations, A-112.
KALANTARI, Iraj and RETZLAFF, Allen. Recursively enumerable topological spaces. Preliminary report, A-549.
KALIKOW, Steven Arthur. Generalized random walk in a random environment, A-646.
KALISCH, G. K. On unitary invariants of certain symmetric operators. Preliminary report, A-639.
KALLAHER, Michael J. See FOULSER, David A.
KALOUPTSIDIS, N. and ELLIOTT, D. L. Stability theory of nonlinear control systems, A-314.
KALTON, N. J. and PECK, N. T. Quotients of L_p, $0 \leq p < 1$, A-115.
KAMOWITZ, Herbert. The spectra of a class of operators on the disc algebra, A-488.
KAMP, William P. Trace class criteria for integral operators, A-489.
KANAMORI, A. On Vopenka's and related principles. Preliminary report, A-392.
KANG, Ming-Chang. Projective modules and Picard groups, A-373.
KANNAN, V. Lattices of topologies. I, A-259.
KANNAPPAN, Pl. On the measurable solutions of two functional equations, A-477.
KANNAPPAN, Pl. and TAYLOR, M. A. On closure conditions, A-64.
KANTOR, William M. Finite groups generated by elations of projective spaces, A-134.
KAPILA, A. K. and MATKOWSKY, B. J. Arrhenius reactions in diffusive systems: Ignition and extinction, A-505.
KAPLAN, Wilfred. On the trajectories of a quadratic differential, A-469.
KAPOOR, G. P. and GOPAL, K. On the mean values of functions analytic in the unit disc. Preliminary report, A-381.
KARON, John M. Computing best approximations by the continuation method, A-478.
KARRAS, Ulrich. On pencils of curves and surface singularities. Preliminary report, A-329.
KARTSATOS, Athanassios G. On the behaviour near infinity of oscillatory solutions, A-16.
KATO, Tosio. An operator inequality and application, A-641.
KATZ, Elyahu. See DULA, Giora.
KAUFFMAN, Louis H. Signature of branched fibrations. Preliminary report, A-341.
KAUFMAN, E. H., Jr. and TAYLOR, G. D. Uniform approximation with rational functions having negative poles, A-479.
KAUFMANN, Matt. A new omitting types theorem for L(Q), A-438; Back-and-forth systems for stationary logic. Preliminary report, A-549.
KAZDAN, Jerry L. Volume, injectivity radius, and Wiedersehen Flasche, A-582.
KAZHDAN, David. Representations of semisimple groups over finite fields, A-305.
KEARFOTT, Baker. Degree theory, Sperner's lemma, and a generalized method of bisections. Preliminary report, A-168.
KEISLER, Michael. A condition yielding an integral representation of the members of $ba(S, \Sigma)^*$. Preliminary report, A-385.
KELLER, Joseph B. Rays, waves, and asymptotics, A-176; Population genetics and diffusion equations, A-349.
KELLEY, Al. See CUSHMAN, Richard.
KELLEY, R. G., Jr. See WILLIAMS, R. T.
KELLOGG, Charles N. See BARNARD, Roger W.
KELLUM, Kenneth R. Function space topologies for Darboux and connectivity functions, A-426.
KELLY, David. See GRÄTZER, George.
KENNISON, John F. See LEDBETTER, Carl S.
KENNY, G. Otis. See BALL, Richard N.
KERSHNER, Richard B. Paving with convex pentagons. Preliminary report, A-491.
KERTZ, Robert P. and NACHMAN, David C. Optimal policies for the nonstationary dynamic programming model with general total reward function. II. The ws^{∞}-topology case, A-133.
KEYFITZ, B. See LAX, Peter D.
KEYFITZ, Barbara L. and KRANZER, Herbert C. Existence and uniqueness of entropy solutions to the Riemann problem for hyperbolic systems of two nonlinear conservation laws, A-96.
KHALILI, Siamak. On Lipschitz properties of Brownian motion random measure. Preliminary report, A-255; Strong Markov property for a Brownian motion random measure. Preliminary report, A-439.
KHAN, M. A. Chain conditions on subgroups of LCA groups, A-443.
KHAN, M. Zubair. Modules behaving like torsion abelian groups, A-376.
KHAN, R. S. See ANSARI, M. S.
KHARAGHANI, H. Absolutely continuous weakly almost periodic measures. Preliminary report, A-484.
KIM, J. H. Completion of a quasi local ring. Preliminary report, A-52.
KIM, Jin Bai. The tree defined by a sequence of nonnegative integers, A-400.
KIM, K. H. and ROUSH, F. W. Enumeration of normal topologies on a finite set, A-519; Enumeration of semiorders and transitive relations, A-610.
KIMBERLING, Clark. Bernoulli zero-one sequences. Preliminary report, A-455.
KINDERLEHRER, David. Variational inequalities and free boundary value problems, A-98.
KINDERLEHRER, David S., NIRENBERG, Louis and SPRUCK, Joe. Remarks about higher order free boundary problems, A-581.
KING, Henry. See AKBULUT, Selman.
KING, J. T. See GROETSCH, C. W.
KING, James R. Boundaries of complex analytic varieties in projective space, A-473.
KING, Lucy Lam. Statistical approach to quality control in clinical chemistry laboratories, A-400.
KING, Stephen C. The isoclinism class of a finite group. Preliminary report, A-369.
KINNEY, James and ALEXANDER, Charles C. Counterexamples to conjectures by Bondy and Chvatal. Preliminary report, A-628.
KINNEY, John. Some computer problems for probability, A-188.
KINTALA, Chandra M. R. Refining nondeterminism in Q^+, A-251.
KIRBY, Robion. See AKBULUT, Selman.
KIRBY, Robion and MELVIN, Paul. Slice knots and property R, A-353.
KIRK, W. A. Fixed point theorems and surjectivity results for nonlinear mappings in Banach spaces. Preliminary report, A-127.
---. See DOWNING, David.
KIRKMAN, Ellen E. and KUZMANOVICH, James. Orders over hereditary rings, A-61.
KIRKMAN, Ellen E., KUZMANOVICH, James and MAZZOLA, Joseph B. Projective modules over commutative hereditary rings, A-52.
KISHORE, Masao. Odd integers N with five distinct prime factors for which $2 - 2/10^{10} < \sigma(N)/N < 2 + 2/10^{10}$. Preliminary report, A-46.

KITCHEN, J. W. and ROBBINS, D. A. Gelfand representations of Banach modules, A-115.
KITTEL, Phyllis M. Intermediate logics. Preliminary report, A-583.
KLAASEN, Gene A. Asymptotic properties of third order linear differential equations. Coauthored with J. Michael Dolan, A-93; Decompositions of solution spaces of third order differential equations. Coauthored with J. Michael Dolan, A-93.
KLASSEN, Vuryl J. Conformal mappings for free streamline problems, A-505.
KLEINFELD, Erwin and SMITH, H. F. Prime locally (-1,1) rings with idempotent and a chain condition, A-423.
KLEINFELD, Margaret Humm. Rings with x(yz) = z(yx), A-2.
KLEITMAN, Daniel J. Fast but imperfect algorithms, A-356.
KLETZING, Dennis. Rational representations of Q-groups. Preliminary report, A-63.
KLINE, Morris. How pure was pure math: The record of history, A-27.
KNIGHT, Ronald A. Certain closed flows on a 2-manifold, A-87.
KNILL, R. J. On the index of isolated closed tori, A-149.
KNOEBEL, R. Arthur. Axioms for diagrams and categories, A-234.
KNOX, Nathaniel. The inverse semigroup coproduct of an arbitrary non-empty collection of groups, A-69.
KNUEPPEL, Nicholas. Weak convergence for a sequence of total progeny processes. Preliminary report, A-163.
KOCH, Richard M. and LOWENTHAL, Franklin. Uniform finite generation of Lie groups locally-isomorphic to SL(2, R), A-468.
KOFNER, Jacob. On quasi-metrizable nonorthocompact spaces, A-623.
KOGELMAN, Stanley. See WARREN, Joseph.
KOHLER, Werner. Multiple scales analysis of a randomly-perturbed one-dimensional wave equation. Preliminary report, A-316.
KOHLMAYR, Gerhard F. A logarithmically closed field of generalized functions, A-245; Normed fields and topological fields which are not copies of C, A-278; Good news about topological fields, A-300; Metric topological division algebras, A-309; A topological division ring setting for linear partial differential equations with constant coefficients, A-386; A solution of Hilbert's first problem concerning the continuum hypothesis, A-447; Pragmatic set theory and the Boolean prime ideal theorem, A-553; A nonvoid partially ordered set without maximal elements, A-570.
KOHN, Meryle. See KOHN, Samuel.
KOHN, Samuel, GOTTLIEB, Allan and KOHN, Meryle. A generating function approach to the traveling salesman problem, A-248.
KOHN, Samuel and KOHN, Meryle. Investigation of stability of the Lindstedt equation using Struble's technique. Preliminary report, A-89.
KOLASKI, Clinton. An F. and M. Riesz type theorem for the unit ball in complex N-space. Preliminary report, A-111.
KOLK, Johan A. C. Spectra of compact negatively curved locally symmetric spaces, A-649.
KOLMAN, Bernard. See BECK, Robert E.
KOMKOV, Vadim. Dual variational principles, A-131; Another approach to the concept of a generalized solution of a differential equation, A-637.
KOMORNICKI, Wojciech. Multiplications in two-cell spectra. Preliminary report, A-148.
KONRAD, Michael D. A mathematical system with applications. Preliminary report, A-322.
KONVALINA, John. Difference sets and quasigroups, A-32.
KORENBLUM, Boris. A Beurling-type theorem, A-307.
KOTMAN, Larry J. An entire function with irregular growth and more than one deficient value, A-580.
KOTZMANN, Ernst. Segal algebras on nonabelian groups, A-483.
KOVACS, Amos. Generic splitting fields. Preliminary report, A-57.
KOVESI-DOMOKOS, S. On algebraic models in the theory of elementary particles, A-571.
KOWALIK, Janusz S. Hydroelectric power system optimization is a large scale mathematical programming problem, A-350.
KOZLOWSKI, George. Postnikov systems in shape theory. Preliminary report, A-500.
KRAINES, David and LADA, Thomas. A counterexample to the transfer conjecture, A-632.
KRAMARZ, Luis. Global approximations to solutions of ordinary initial value problems. Preliminary report, A-171.
KRAMER, Richard J. Sub- and super-solutions of quasi-linear elliptic boundary value problems, A-308.
KRANZER, Herbert C. See KEYFITZ, Barbara L.
KRAUS, Jon. Compact groups of automorphisms with spectrum condition. Preliminary report, A-238.
KREIMER, H. F. Normal bases for Galois p-extensions of rings. Preliminary report, A-268.
KRENER, Arthur J. A formal approach to stochastic integration. Preliminary report, A-648.
KRENGEL, Ulrich and SUCHESTON, Louis. How to bet against a prophet. (Some L^1 dominated estimates for semiamarts), A-159.
KREYSZIG, Erwin O. An application of Markov chains in social sciences, A-256.
KRIEGER, M. See ERDÖS, P.
KRIETE, Thomas. The growth of point evaluation functionals in certain $H^2(\mu)$ spaces, A-578.
KRISHNAN, V. S. Fine quasi-resolutions of semigroups with identity. Preliminary report, A-565.
KRIVOSHEIN, L. E., LEUNG, K. V., MANGERON, D. J. and OGUZTORELI, M. N. Well posed problems concerning nonlinear integro-differential systems with hyperbolic operators and self-controlled limits of integration, A-313; Studies of nonlinear integro-differential systems with parabolic operators and self-controls in the limits of integration and in the initial value conditions, A-485.
KROL, Igor. The existence of a "smooth truncation" operator bounded on $W_{m,p}(R^n)$. Preliminary report, A-384.
KRUSKAL, Martin. Surreal numbers, A-43.
KUBICEK, John D. See HICKS, Troy L.
KUELBS, J. D. Some exponential moments with applications to density estimation and the empirical distribution function, A-336.
KUHL, Frank P. See GIARDINA, Charles R.
KUMAGAI, Donna. A unified proof for subharmonicity of functions associated with certain uniform algebras, A-615.
KUMAR, A. and SCHREIBER, B. M. Stability conditions for Banach-space-valued random variables, A-335.
KUMMER, Martin. On resonant classical Hamiltonians with two degrees of freedom. Preliminary report, A-174.
KUNEN, Kenneth. An extremally disconnected space, A-263.
---. See BROVERMAN, S.
KUPERBERG, Wlodzimierz. Unstable sets and the set of unstable points, A-146; On embeddings of manifolds into Cartesian products of compacta, A-634.
KYNER, Walter T. See BURNS, T. J.
KURLAND, Henry L. Transition solutions for multiple time scale systems. Preliminary report, A-93.
KURSHAN, R. P. See GOPINATH, B.
KURTZ, Thomas G. The optional sampling theorem for martingales indexed by partially ordered sets and representation of stochastic processes. Preliminary report, A-165.
KUZMANOVICH, James. See KIRKMAN, Ellen E.
KWAN-YUK, Claire Sit. See BRAUDE, Eric John.
KYNER, Walter T. and SANCHEZ, David A. Lotka's demographic equation--some asymptotic results and a new numerical approach, A-349.
KYRALA, Ali. A relativistic generalization of Maxwell's equations. Preliminary report, A-19.
LACHER, R. C. See BRYANT, J. L.
LACHLAN, A. H. A countable counterexample to Skolemisation of elementary pairs. Preliminary report, A-550.
LACHLAN, A. H. and WOODROW, Robert E. Countable ultrahomogeneous undirected graphs. Preliminary report, A-370.
LADA, Thomas. See KRAINES, David.

LADDE, Gangaram S. Stability technique and thought provocative random dynamical systems. Preliminary report, A-89; Competitive processes IV: Stability of stochastic hereditary systems, A-433; Systems of differential inequalities and stochastic differential equations. IV, A-543; Stabilizing and oscillizing time-delays in single-species processes, A-618.
LAFFEY, Thomas J. The number of solutions of $x^4 = 1$ in a finite group. Preliminary report, A-1; Property P for a pair of matrices, one of which is nonderogatory. Preliminary report, A-230; The Hughes problem for exponent nine. Preliminary report, A-377; Two-generated subalgebras of matrix algebras. Preliminary report, A-529.
LA FRANCE, Jane. See WARNE, Ronson J.
LAHR, Charles D. See JOHNSON, David L.
LAHR, Charles D. and JONES, Charles A. Weak and norm approximate identities are different, A-566.
LAINE, Thomas P. Convolution structures for polynomials orthogonal with respect to the weight function $(1-x^2)^{\alpha}|x|^{2\beta+1}$, Preliminary report, A-326.
LAKSER, Harry. Semisimplicial algebras that satisfy the Kan extension condition, A-526.
---. See GRÄTZER, G.
LAKSHMIKANTHAM, V. See BERNFELD, Stephen R.
---. See CHANDRA, Jagdish.
LAKSHMIKANTHAM, V., MITCHELL, A. R. and SETY, D. D. Quasilinearization of boundary value problems in separable Hilbert spaces, A-91.
LAMBERT, Howard W. A class of nonsplittable links, A-445; A-586; A-650.
LAMOREAUX, Jack. See CAMPBELL, Douglas M.
LAMPE, William A. A note on algebras of fixed similarity type. Preliminary report, A-371.
LANDAHL, Herbert D. Simulation of transient and steady state transport in the kidney, A-350.
LANDAUER, Christopher. Matroids and permutation groups, A-627.
LANDESMAN, E. M. and WALTON, Ian G. A generalized saddle point characterization for solutions of singular problems in differential equations. Preliminary report, A-347.
LANDGREN, John J. Some essentially selfadjoint Dirac operators. Preliminary report, A-274.
LANDIS, Dale L. Singular solutions: A geometric approach, A-474.
LANDRAITIS, Charles K. On the homomorphism relation between countable order types, A-569.
LANE, Ernest P. Insertion of a continuous function. Preliminary report, A-555.
LANG, George E., Jr. Cross sectioning fibrations over spheres with Riemann surface fiber, A-147.
LANGE, Ridgley. 2-decomposable operators are decomposable, A-540.
LAROCHE, A. See BENABDALLAH, K.
LA ROCHE, Peter. Recursively presented Boolean algebras, A-552.
LARSON, David R. A structure theorem for nest algebras, A-131.
LARSON, Roland E. A topological model for population growth. Preliminary report, A-141.
LASHOF, Richard K. G-smoothing theory, A-152.
LASKAR, Renu. See ALLAN, Robert B.
LASKAR, Renu and FREEMAN, Jim. Further results on 3-nets, A-35.
LATCH, Dana May. Weak homotopy equivalence (WHE) axiom is stronger than strong homotopy (SH) axiom, for homology theories of simplicial sets, A-147.
LAU, A. Y. W. Images of compact 0-dimensional semigroups, A-277.
LAUFER, Henry B. The behavior of the exceptional set under ambient deformations. Preliminary report, A-324.
LAVOIE, J.-L. See SRIVASTAVA, H. M.
LAWSON, Jimmie D. Continuous lattices and topological algebra, A-269.
LAWSON, Terry C. Open book decompositions for odd dimensional manifolds, A-277.
LAX, Peter D. See PHILLIPS, Ralph S.
LAX, Peter D., HARTEN, A., HYMAN, J. M. and KEYFITZ, B. On finite-difference approximations and the entropy condition for shocks, A-173.
LAZER, Alan C. See AHMAD, Shair.
---. See CASTRO, Alfonso.
LEDBETTER, Carl S. A criterion for the representability of algebras by sections in sheaves. Preliminary report, A-463.
LEDBETTER, Carl S. and KENNISON, John F. Sheaf representations and the Dedekind reals for Heyting algebras. Preliminary report, A-423.
LEDGER, Arthur J. See BLAIR, David E.
LEE, Cheng-Ming. An existence theorem via an intuitive idea and fixed point theorems. Preliminary report, A-130.
LEE, Heisook. An exact sequence in base change of a normal variety. Preliminary report, A-369.
LEE, John W. Best quadrature formulas and splines, A-479.
---. See ANSELONE, P. M.
LEE, Ken W. See BROWN, Johnny M.
LEE, Kit-sum. The global dimension of group rings of nilpotent groups. Preliminary report, A-375; Every quasiprime kernel functor is induced by a prime ideal, A-414.
LEE, Sa Ge and YOON, Jaihan. Algebras of finite strict multiplicity. Preliminary report, A-245.
LEE, Will Y. K. On a problem of Kato on the L^2-continuity of pseudodifferential operators, A-99.
LEELA, S. See CHANDRA, Jagdish.
LEELA, S. and MOAURO, V. Existence of solutions of differential equations with delay in Banach spaces, A-92.
LEES, Paul. Steinberg representations for $GL_n(\mathbb{Z}/p^h\mathbb{Z})$, A-71.
LEGG, David and WARD, Joe. Essentially Hermitian operators on A_1 are compact perturbations of Hermitians, A-488.
LEHMER, D. H. Permanent problems concerning combinatorial matrices, A-345; Highly restricted permutations revisited, A-450.
LEHNIGK, Siegfried H. Boundary condition solutions of the generalized Feller equation, A-272.
---. See BAZLEY, Norman W.
LEHRER-LLAMED, Yehiel. On polynomials orthogonal with respect to the trace bilinear form, A-232.
LEININGER, Charles W. Relations of even order on finite domains, A-552.
LEITMANN, George. Avoidance control, A-349; A stabilization policy for an uncertain economy, A-642.
LEITZEL, James R. C. Congruence function fields of genus g and class number g + 1, A-47.
LEON, Jeffrey S. and SIMS, Charles C. The existence and uniqueness of a simple group generated by {3,4}-transpositions, A-69.
LEPOWSKY, James and WILSON, Robert Lee. A construction of certain Kac-Moody Lie algebras, A-572.
LERMAN, Manuel. Automorphism bases for the semilattice of recursively enumerable degrees, A-251.
LERMAN, Manuel and SCHMERL, James. Theories with recursive models. Preliminary report, A-300.
LESNIAK-FOSTER, Linda. See STRAIGHT, H. Joseph.
LESSNER, Lawrence. Interchanging iterated integration, A-76.
LEUNG, Anthony. Periodic solutions for a prey-predator differential delay equation, A-100; Limiting behavior for a prey-predator model with diffusion and crowding effects, A-546.
LEUNG, K. V. See BONDARENKO, B. A.
---. See CHIRIACESCU, S. T.
---. See KRIVOSHEIN, L. E.
LEUTHAUSER, J. See JONES, J., Jr.
LEVENTHAL, Stephen H. See CIMENT, Melvyn.
LEVINE, Howard A. Saddle points and instability of solutions of nonlinear partial differential equations: Some examples, A-307.
LEVINE, Howard A. and MONTGOMERY, John T. On quenching of solutions of a nonlinear parabolic equation with a finite singularity. Preliminary report, A-378.
LEVITZ, Hilbert. An ordinal bound for the set of polynomial functions with exponentiation, A-42.
LEVY, Lawrence S. See BITTMAN, Richard M.
LEVY, Ronnie. Countable spaces without points of first countability. Preliminary report, A-141; Small compact

spaces. Preliminary report, A-555.
LEWIS, D. R. The distance from a subspace of L_p to a Hilbert space, A-116.
LEWIS, John L. Convolutions of starlike functions, A-579.
LEWIS, Paul W. A characterization of weakly compact operators. Preliminary report, A-76.
---. See BILYEU, Russell G.
LEWIS, Robert H. Homology decompositions of non-simply connected spaces. Preliminary report, A-558; On cofibrations of the form $A \to X \to K'(G, n+1)$, $\pi_1 A \neq 0$. Preliminary report, A-623.
LEWIS, Roger T. See ETGEN, Garret J.
LI, Shuo-Yen Robert. n-person NIM and n-person Moore's NIM_k, A-33.
LIANG, David S. See HIRSCHMAN, I. I., Jr.
LICK, Don R. and WALL, Curtiss E. Turán's theorem and graphical parameters, A-39.
LIEBERHERR, Karl. Complexity of superresolution. Preliminary report, A-433.
LIEM, Vo Thanh. A counterexample in 1_2-manifold theory. Preliminary report, A-558.
LIGH, Steve. On a class of ring-semigroups. Preliminary report, A-268.
LIN, Charlotte R. Recursion theory on countable Abelian groups, A-550.
LIN, S. See BURR, S. A.
LIN, T. Y. Stable cohomotopy groups of spectra for connective K-theories, A-623.
LINDGREN, William F. See HEATH, Robert W.
LINDLEY, Thomas L., III. Partial truth tables, A-252.
LINDNER, Charles C. A self orthogonal partial latin square can be embedded in a self orthogonal latin square, A-37.
LIPMAN, Marc J. Fusion free representations of finite groups, A-467.
LIPSCHUTZ, Seymour. On the conjugacy problem and tree products of groups, A-66.
LIPSCHUTZ-YEVICK, Miriam. On inconsistency and undecidability, A-20; An inconsistency in the non-computability argument of Martin Davis, A-253; Primitive signs as marks and as one symbol sequences, A-386.
LIU, D. B. and YOUNG, L. C. Derivatives, differences, multiple Fourier kernels, A-73.
LIU, Tai-Ping. Asymptotic behavior of solutions of general systems of nonlinear hyperbolic conservation laws. Preliminary report, A-98.
LIULEVICIUS, Arunas. Characters tell all, A-341.
LLOYD, Justin T. See BYRD, Richard D.
LLOYD, Stuart P. Markov representation of Martingales, A-162.
---. See NEVILLE, Charles W.
LLOYD, Stuart P. and NEVILLE, Charles W. F_N-spaces, A-535.
LOATS, James T. Some results on Boolean algebras. Preliminary report, A-290; On "strongly" rigid Boolean algebras (BA's) and cofinalities of BA's, A-453.
LOGAN, B. F., Jr. Bandlimited functions bounded below over an interval, A-331.
LOGANATHAN, M. Cohomology and homology of semigroups with idempotents. Preliminary report, A-524.
LOOMIS, Irene. See WARNE, Ronson J.
LOONEY, Carl. Operator minimaxima in ordered Banach spaces, A-133.
LOPEZ, Antonio M., Jr. The maximal right quotient semigroup of a strong semilattice of semigroups, A-372.
LOPEZ, Manuel. Matrix differential operators, A-382.
LORCH, Lee and TZIMBALARIO, Jean. A quasi-equivalence between Borel summability and convergence for Fourier-Laguerre series at the end-point, A-102.
LORD, James M. $\mathfrak{R}$-semigroups: isomorphism criterion and structure group description. Preliminary report, A-7.
LORD, M. E., NICHOLS, D. and TSAY, J. Measuring rates for return for investment projects, A-100.
LOURY, Glenn C. The optimum exploitation of an unknown reserve, A-506.
LOVÁSZ, László and PLUMMER, M. D. On minimal elementary bipartite graphs, A-626.
LOWENTHAL, Franklin. See KOCH, Richard M.
LUDWIG, Donald. Control and spatial patterning of an insect outbreak system, A-508.
LUKE, Jon C. Buying and selling algorithms. Preliminary report, A-582.
LUKES, John W. See JONES, John, Jr.
LUM, Lewis. See GORDH, G. R., Jr.
LUNING, C. D. and PERRY, W. L. An iterative technique for solution of a nonlinear eigenvalue problem with application to the generalized Emden-Fowler equation, A-93.
LUTZER, D. J. See van DOUWEN, E. K.
LYNCH, James F. Probabilities of sentences on finite and countable models, A-29; Applications of 0-1 laws in finite and countable spaces, A-552.
LYONS, Carter. A characterization of the radical of E(G) in terms of G. Preliminary report, A-58.
LYONS, Richard. See GORENSTEIN, Daniel.
MA, T. W. Total derivatives in locally convex spaces. Preliminary report, A-537; One dimensional invisible but detectable functions. Preliminary report, A-642.
MacBAIN, John A. Global bifurcation from self-adjoint operators. Preliminary report, A-116.
MacCORMACK, Robert W. An efficient numerical method for solving the time-dependent compressible Navier-Stokes equations for high Reynolds number flows past arbitrarily shaped bodies. Preliminary report, A-401; An approach for solving stiff hyperbolic-parabolic systems. Preliminary report, A-650.
MACINTYRE, Angus J. and McKENNA, Kenneth. A converse to Tarski's theorem on real closed ordered fields, A-28.
MACON, Nathaniel and BRYANT, Paul. Indefinite sums of economic time series, A-507.
MacWILLIAMS, Jessie and SLOANE, Neil. Surprising properties of codes over GF(4), A-36.
MADAN, Ved P. Stability of viscoelastic (Voigt) bars. Preliminary report, A-19; Influence of an elastic end support on the stability of viscoelastic (Voigt) column, A-544.
MADDUX, Roger. Relation algebras and neat embeddings of cylindric algebras. Preliminary report, A-298.
MAGGIOLO-SCHETTINI, Andrea and UCCELLA, Giovanni. On some characterizations of computable functions $N^* \to N^*$, A-551.
MAGILL, K. D., Jr. Homomorphisms from S(X) into S(Y). Preliminary report, A-71.
MAGNUS, Alfred E. Nonspherical principal series representations, A-468.
MAGURN, Bruce A. SK_1 of dihedral groups, A-369.
MAHFOUD, Wadi E. Oscillation criteria for a second order delay differential equation, A-88.
MAHONY, L. M. See MAHONY, P. S.
MAHONY, P. S. and MAHONY, L. M. A number theoretic study in orinthology, A-610.
MAHOWALD, Mark. New infinite families in the stable 2-stem of the homotopy of spheres, A-340.
MAJDA, Andrew and RALSTON, James. Nonlinear instability, discrete shocks, and the entropy condition, A-646.
MAKKAI, M. See HARNIK, V.
MAKOWSKY, J. A., II. A note on stationary logic. Preliminary report, A-438.
MALIK, Saroj B. and MOTT, Joe L. Strong s-rings and Prüfer domains. Preliminary report, A-460.
MALKEVITCH, Joseph. Single-peaked voter preference schedules. Preliminary report, A-179.
MALLEY, James. Algebra automorphisms and power series field extensions. Preliminary report, A-228.
MALM, Donald G. Number theory as an experimental science, A-185; On Monte Carlo primality tests, A-529.
MALONE, J. J. D.g. near rings on D_{2n}, n even. Preliminary report, A-60.
MALRAISON, Pierre. Bicategories from a homotopy associative point of view. Preliminary report, A-62.
MANDELBAUM, Richard. Four manifolds, complex surfaces and framed links, A-635.
MANGEL, Marc and CLARK, Colin W. Effects of schooling behavior of tuna on the purse-seine fishery, A-508.
MANGERON, D. J. See BONDARENKO, B. A.
---. See CHIRIACESCU, S. T.
---. See KRIVOSHEIN, L. E.
MANITIUS, A. Controllability and observability of retarded functional differential equations--a C_0-semigroup approach, A-312.

MANN, W. Robert. Improving convergence by averaging, A-124.
MANNA, Zohar. The fixedpoint theory of recursive programs, A-644.
MANOCHA, Jitendra. A generalization of singular submodule for modules. Preliminary report, A-61.
MANSFIELD, Lois. Mixed finite element methods for elliptic equations, A-479.
MARCHETTO, D. A. Invariant measures admitted by Denjoy-type flows on orientable surfaces of higher genus. Preliminary report, A-157.
MARCUM, Howard J. Twisted Whitehead products. Preliminary report, A-498.
MARCUS, Daniel A. Normal semimodules over a good ordered domain, A-42.
MARCUS, Marvin and FILIPPENKO, Ivan. Linear operators preserving the decomposable numerical range, A-343.
MARCUS, Marvin, MOYLS, B. N. and FILIPPENKO, I. Some convexity properties of the higher numerical range, A-342.
MARGULIES, William. The residue of the function $f(z) = (1 - \gamma z)^{-1} \exp \alpha z^{-1} \exp \beta(1 - z)^{-1}$. Preliminary report, A-77.
MARKANDA, Raj K. and PASCUAL, Joaquin. Fixed rings of automorphisms of k[x, y]. Preliminary report, A-527.
MARKOWSKY, George. Scott's theory of computation and continuous lattices, A-270.
MARLIN, J. A. See FULP, R. O.
MARSDEN, J. E. Some interactions between bifurcation theory and catastrophe theory, A-642.
MARTIN, Harold. See JANOS, Ludvik.
MARTIN, Joseph. Surgery on solid tori. Preliminary report, A-354.
MARTINDALE, Wallace S., III. See BAXTER, Willard E.
MARXEN, Donald. Pseudometrics on quotient spaces, A-141.
MASAT, Francis E. The minimum group congruence on a regular semigroup. Preliminary report, A-69; The structure of the minimum group kernel of a regular semigroup, A-416; Proper regular semigroups. Preliminary report, A-519.
MASSAM, Hélène. Optimality criterion for a cone-convex program without constraint qualification. Preliminary report, A-386.
MASSEY, Frank J., III. Evolution equations governed by a class of perturbed accretive operators. Preliminary report, A-95.
MASSEY, James L. Introduction to convolutional codes. Preliminary report, A-182.
MASTIN, C. Wayne. Discrete quasiconformal mappings, A-78.
MATCHETT, Andrew. A subgroup of the projective class group. Preliminary report, A-65.
MATHIS, Frank H. A Ritz-Galerkin procedure for hereditary optimal control problems. Preliminary report, A-169.
MATIJEVIC, Jacob R. See ESTES, Dennis R.
MATKOWSKY, B. J. See KAPILA, A. K.
MATLIS, Eben. Higher properties of R-sequences, A-321; Representation theorems on a category of R-modules. Preliminary report, A-460.
MATTSON, H. F., Jr. See ASSMUS, E. F., Jr.
MAULDIN, R. Daniel. See CENZER, Douglas.
MAX, Nelson L. Turning a sphere inside out with computer graphics, A-333.
MAXSON, C. J. and SMITH, Kirby C. Endomorphisms of linear automata, A-182.
MAXWELL, Charles N. Degree of multiple-valued maps of spheres, A-635.
MAXWELL, Jim. See EVANS, Benny.
MAY, E. Lee, Jr. A nonlinear transformation with a nondifferentiable resolvent function. A-127; A nonlinear transformation with no spectrum, A-630.
MAY, Kenneth O. The relevance of C. F. Gauss on his bicentennial, A-27.
MAYER, Richard. An equation for nonlinear wave propagation in thermoviscuous fluids, A-176.
MAYLAND, E. J., Jr. Examples of nonfibred knots with Π_c knot group. Preliminary report, A-353.
MAYNE, Joseph H. Centralizing automorphisms and ideals in prime rings. Preliminary report, A-59.
MAZZOLA, Joseph B. See KIRKMAN, Ellen E.
MCADAM, S. See DAVIS, E. D.
McCALL, J. D., FRICKE, G. H. and BEYER, W. A. Remainders of power series. Preliminary report, A-80.
McCONNELL, Alan. See BERKSON, A. J.
McCOY, Peter A. Extremal properties of real biaxially symmetric harmonic functions, A-78; Chebyshev approximation of axially symmetric potentials in E^3. Preliminary report, A-469.
McCRIMMON, Kevin. Jordan algebras and their applications, A-272.
McCRORY, Clint. See BANCHOFF, Thomas F.
McDONALD, John N. Positive operators on the disk algebra, A-114.
McDOWELL, Kenneth. See BULMAN-FLEMING, Sydney.
McELIECE, Robert J. Bounds for codes, via linear programming, A-183; Combinatorial analysis of convolutional codes, A-355.
McGEHEE, O. C. and WOODWARD, G. S. Continuous graphs. Preliminary report, A-109.
McGRATH, Stephen A. Abelian ergodic theorems of local type, A-125.
McKEAN, H. F. Hyperelliptic Riemann surface with infinitely many branch points and the related theta function, A-77.
McKENNA, J. P. and RAUCH, J. Strongly nonlinear Landesman-Lazer theorems, A-237.
McKENNA, Kenneth. Pseudo-real-closed and pseudo-p-adically closed fields, A-520.
---. See MACINTYRE, Angus J.
McLAUGHLIN, D. E. See DERSHEM, H. L.
McLAUGHLIN, T. G. Two observations on strongly universal regressive isols, A-27.
McLINDEN, Lynn. Extremum problems involving a convex process. Preliminary report, A-131.
McMILLAN, Daniel R., Jr. An arc in M^n with no neighborhood in S^n, $n \geq 4$, A-22.
McNULTY, George F. Fragments of first order logic. II. Positive logic. Preliminary report, A-28.
McRAE, George. Topological structures as (co-) reflective subcategories, A-144; On the left and right injective dimensions of coherent rings. Preliminary report, A-271.
MELKMAN, Avraham A. and MICCHELLI, Charles A. Optimal estimation of linear operators from inaccurate data in Hilbert spaces, A-480.
MELTER, Robert A. See HARARY, Frank.
MELVIN, Paul. See KIRBY, Robion.
MELVIN, Peter J. On deviations from linear wave motion in inhomogeneous stars, A-178.
MELVIN, William R. Design of bifocal lenses. Preliminary report, A-311.
MENGERSEN, Ingrid. The maximum number of edges without crossings in drawings of complete n-partite graphs. Preliminary report, A-230.
MERKLEN, Héctor A. Group bases in group rings, A-5.
MERRIS, Russell. Generalized matrix functions, A-342; The structure of higher degree symmetry classes of tensors, A-524; Subgroups normal modulo the zeros of an irreducible character, A-562.
MERZBACH, Ely. Predictability and extension of the stochastic integral in the plane. Preliminary report, A-255.
MERRIS, Russell. Inequalities involving positive-definite matrices, A-55.
MESIROV, Jill P. Necessary conditions for existence of minima in the calculus of variations. Preliminary report, A-157.
MESSER, Robert. Open 2-manifolds as covering spaces. Preliminary report, A-570.
MESSER, Robert and WRIGHT, Alden. Embedding open 3-manifolds in compact 3-manifolds, A-151.
METCALF, Frederic T. See CHALMERS, Bruce L.
---. See ODDSON, J. K.
METZGER, Thomas A. On vanishing Eichler periods and Carleson sets. Preliminary report, A-308.
MEZZAROBA, Joseph A. and SALWACH, Chester J. The four biplanes with K = 9, A-32.
MIAMEE, A. G. and SALEHI, H. Harmonizability, V-boundedness and stationary dilation of stochastic processes, A-393.

MICCHELLI, Charles A. See MELKMAN, Avraham A.
MIHRAM, G. Arthur. Why are computerised simulations not mathematical models? Preliminary report, A-315.
MILES, Joseph. A theorem on entire functions of infinite order, A-327.
MILLAR, P. Warwick. Sample function analysis at last exit times. Preliminary report, A-647.
MILLAR, Terrence S. Some results in recursive model theory. Preliminary report, A-252.
MILLER, Ann. Characterizations of k-distributive lattices. Preliminary report, A-41.
MILLER, Arnold W. Vaught's conjecture for theories of one unary operation. Preliminary report, A-253; The number of countable rigid models and the Barwise compactness theorem. Preliminary report, A-435.
MILLER, Charles F., III. See BAUMSLAG, Gilbert.
MILLER, Douglas E. On classes closed under unions of chains, A-28.
MILLER, Jay I. Duality in regular p-groups. Preliminary report, A-69; Center-by-metabelian groups of prime exponent, A-415.
MILLER, Kenneth G. Hypoellipticity on the Heisenberg group, A-541.
MILLER, Sanford S., MOCANU, Petru T. and READE, Maxwell O. Starlike integral operators. Preliminary report, A-79.
MILLER, Webb C. The composition of numerically stable procedures. Preliminary report, A-643.
MILLET, Kenneth C. Embeddings of D^n in $D^m \times b$. A-354.
MILLMAN, Richard. Laplace-Beltrami operator on differential forms for symmetric spaces, A-138.
MILLS, George. Extensions of models of Peano arithmetic. Preliminary report, A-254; Substructure lattices in Peano arithmetic. Preliminary report, A-435.
MILMAN, Mario. An inequality for a generalized modulus of continuity, A-427; Embeddings of L(p, q) spaces and Orlicz spaces with mixed norms. Preliminary report, A-533.
MILOJEVIĆ, P. S. Surjectivity results for A-proper, their uniform limits and pseudo A-proper maps with applications. Preliminary report, A-16; Fixed point theorems for multivalued P_Y-compact mappings, A-246.
MILNE, Stephen C. Mappings of subspaces into subsets, A-563.
MINKUS, Jerome. On the commutator subgroup of $\langle n, 2k+1, 2\rangle$, A-3; On the branched cyclic coverings of knots with two bridges, A-262.
MISHNAEVSKY, P. A. and RAMM, A. G. Uniqueness theorem of use in relativity. I, A-388; Uniqueness theorem of use in relativity. II, A-431.
MIŠKIN, Valéry V. Regular sets and semiregular points of closed maps. Preliminary report, A-443; Closed maps of Moore spaces. Preliminary report, A-558.
MISLOVE, Michael. The equivalence of continuous lattices and compact Lawson semilattices, A-267.
---. See HOFMANN, Karl H.
MITCHELL, A. Richard. Local and global existence of solutions for BVP in Banach spaces, A-92.
---. See LAKSHMIKANTHAM, V.
MITRO, Joanna B. Markov processes in duality: A useful auxiliary process. Preliminary report, A-163.
MIURA, Robert M. and TUCKWELL, Henry C. Qualitative and quantitative models of spreading cortical depression, A-190.
MOAURO, V. See LEELA, S.
MOCANU, Petru T. See MILLER, Sanford S.
MOCHIZUKI, Horace Y. Unipotent linear transformations on vector spaces over division rings. Preliminary report, A-2.
MOESSNER, Alfred. See XEROUDAKES, George.
MOHAMED, Saad. See JAIN, S. K.
MOISE, Edwin E. Statically tame periodic homeomorphisms of 3-manifolds, A-318.
MOLER, Cleve. Numerical linear algebra, A-583.
MOLLIN, Richard A. Herstein's conjecture, automorphisms and the Schur group, A-6; The Schur group of a field of characteristic zero, A-225.
MONTGOMERY, Hugh L. Enflo's theorem on norms of products of polynomials in many variables. Preliminary report, A-329.
MONTGOMERY, John T. See LEVINE, Howard A.
MONTGOMERY, Susan. Outer automorphisms of prime rings, A-421.
---. See FISHER, Joe W.
MOORE, Emily H. Using the group of a code to compute its minimum weight, A-40.
MOORE, Hal G. and YAQUB, Adil. The equational interdefinability of operations in certain rings, A-58.
MOORE, L. C., Jr. On the norm and relative uniform topologies on a normed Riesz space, A-119.
MOORE, Robert. Commutants of reductive operators. Preliminary report, A-129.
MOORTI, V. R. G. and GARNER, J. B. Existence and uniqueness of solutions to certain nth order boundary value problems. Preliminary report, A-274.
MORDESON, John. See DEVENEY, James K.
MORGAN, Christopher L. Linear relations with small support for group representations, A-344; An algorithm for drawing views of four-dimensional regular convex polytopes, A-491.
MORGAN, Frank. Almost every smooth curve in $\mathbb{R}^3$ bounds a unique area minimizing surface, A-565; Almost every curve in $\mathbb{R}^3$ bounds a unique area minimizing surface, A-574.
MORGAN, John C., II. On ordinally closed sets, A-646.
MORITZ, Elan. Stability criteria expressable through the Poincaré index. Preliminary report, A-428.
MORLEY, T. D. See DUFFIN, R. J.
MORRIS, G. C. See GAY, C. D.
MORRIS, I. See GAY, C. D.
MORROW, J. and ROSSI, H. A local property of linear subspaces of projective space, A-473.
MORROW, James A. The structure of the space of holomorphic functions defined on some neighborhood of the zero section of the tangent bundle of an algebraic curve. Preliminary report, A-473.
MORTON, Hugh R. A criterion for a surface in $\mathbb{R}^3$ to be unknotted, A-303.
MORTON, Patrick. See BRILLHART, John.
MOSTOW, Mark A. The differentiable space structures of of Milnor classifying spaces, simplicial complexes, and geometric realizations, A-148.
MOTT, Joe L. Some results on dimension sequences and Prüfer v-multiplication rings. Preliminary report, A-268.
---. See MALIK, Saroj B.
MOULIS, Edward J., Jr. Generalizations of the Robertson functions. Preliminary report, A-312.
MOUSOURIS, Nick. See PORTER, A. Duane.
MOUSOURIS, Nick and PORTER, A. Duane. The symmetric matric $X_h^{\prime} \ldots X_1^{\prime} A X_1 \ldots X_n = B$, A-55; A consideration by rank of some matric equations. Preliminary report, A-461.
MOYLS, B. N. See MARCUS, Marvin.
MOZZOCHI, C. J. A remark on Goldbach's conjecture V, A-6; A remark on Goldbach's conjecture VI, A-223, A-401; A guide to the literature on the classical Hilbert transform, A-536.
MUCKENHOUPT, Benjamin. Weighted multiplier theorems for trigonometric and Jacobi series. Preliminary report, A-107; Weighted norm inequalities relating the Hilbert transform to the Hardy-Littlewood maximal function, A-325.
MUELLER, Bruno J. Noncommutative localization and invariant theory, A-230; Examples in noncommutative localization, A-466.
MUGLER, Dale H. Completely convex polynomials, A-81.
MUHLY, Paul S. A decomposition for Markov operators. Preliminary report, A-159; Radicals and crossed products. Preliminary report, A-243.
MUKHERJEA, A. Questions on the convergence of distributions of products of random variables in groups, A-165.
MULDOON, Martin E. See ISMAIL, Mourad E. H.
MULLA, F. S. On 3-regular graphs. Preliminary report, A-561.
MULLEN, Gary L. Weak equivalence of functions over a finite field. Preliminary report, A-48.
MULLER, George M. A spline digital filter. Preliminary report, A-545; Wigert's theorem for entire functions of exponential type. Preliminary report, A-616.
MULLIN, Albert A. Relations between fixed-point theory and combinatorial geometry, A-9; On arithmetic functions

asymptotic to the pi-function, A-223; On common fixed extreme points for families of mappings, A-291; On imbrication theory, A-378; On a necessary condition for the validity of the Riemann hypothesis, A-414; On common fixed exposed points for families of mappings, A-532; More relations between fixed-point theory and combinatorial geometry, A-612.
MUNRO, Gordon R. See CLARK, Colin W.
MUNTEANU, Marie-Jeanne. See SEIDMAN, Thomas I.
MURRAY, Amy Cohen. Existence and regularity for solutions of the Korteweg-de Vries equation, A-96; Solutions of the Korteweg-de Vries equation evolving from a "box" and from other irregular initial functions, A-477.
MURRILL, Malcolm. On a hyperanalytic geometry for complex functions, A-250.
MYERS, Dale. Measures on Boolean algebras, orbits in Boolean spaces, and an extension of transcendence rank. Preliminary report, A-447; Constructing noncomputable tilings and using tilings to construct first-order theories. I. Preliminary report, A-451.
MYERS, Robert. See JACO, William.
MYINT-U, Tyn. Satellite theory and Eikonal equation. Preliminary report, A-17.
NACHMAN, David C. See KERTZ, Robert P.
NADLER, Sam B., Jr. Some hyperspace results and questions about retractions. Preliminary report, A-142.
NAGEL, Alexander and RUDIN, Walter. Local boundary behavior of bounded holomorphic functions, A-471.
NAGLE, R. Kent. Alternative methods for nonselfadjoint operators. Preliminary report, A-97.
NAIK-NIMBALKAR, U. See BHASKARAN, R.
NAJAR, Rudolph M. See BECK, Walter E.
NASHED, M. Zuhair. Perturbations and approximations of nonlinear alternative problems. Preliminary report, A-170.
NATARAJAN, P. N. and RANGACHARI, M. S. Matrix transformations between sequence spaces over non-archimedean fields. Preliminary report, A-294.
NATHANSON, Melvyn B. Minimal bases and maximal nonbases for the collection of finite subsets of the integers, A-455.
NAVARRO, Francisco J. Topologically equivalent measures in the Cantor space. Preliminary report, A-384.
NEGREPONTIS, S. See ARGYROS, S.
NEISENDORFER, Joseph. Self equivalences of rational homotopy types. Preliminary report, A-317.
NEUBERGER, John W. Boundary value problems for systems of nonlinear partial differential equations, A-171.
NEUHOFF, D. L. See SHIELDS, Paul C.
NEUMANN, M. and PLEMMONS, R. J. Semiconvergent nonnegative matrices and iterative methods for consistent linear systems, A-545.
NEUMANN, Michael. 3-part splittings for singular and rectangular linear systems. Preliminary report, A-247.
NEUMANN, Walter D. Weighted homogeneous surfaces. Preliminary report, A-326.
NEVILLE, Charles W. See LLOYD, Stuart P.
NEVILLE, Charles W. and LLOYD, Stuart P. $\aleph$-projective spaces, A-535.
NEWMAN, Kenneth. The coalgebra structure of Hopf algebras, A-59.
NEWMAN, Morris. Positive definite matrices and Catalan numbers, A-344.
NG, Kan Ching. The Cantor-Bernstein theorem and related results in a relation algebraic setting. Preliminary report, A-30; A-304.
NG, Kan Ching and TARSKI, Alfred. Relation algebras with transitive closure. Preliminary report, A-29.
NGUYEN, Hien Q. Projections and weak maps in combinatorial geometries. Preliminary report, A-449.
NICHOLS, D. See LORD, M. E.
NICHOLS, J. On the totality of sequences in topological vector spaces, A-115.
NICO, William R. Bounded monoids, A-70.
NIEDERREITER, Harald G. Quasi-Monte Carlo methods and pseudo-random numbers: Some applications of number theory, A-169; A combinatorial problem in additive number theory, A-457.
NIJENHUIS, Albert. Note on the unique determination of graphs by proper subgraphs, A-290.
NILES, Richard. Pushing-up in finite groups. Preliminary report, A-65.
NIRENBERG, Louis. Regularity in free boundary problems, A-581.
---. See KINDERLEHRER, David S.
NISHIURA, T. See BRECKENRIDGE, J. C.
NISHIZEKI, Takao and BAYBARS, Ilker. Lower bounds on the cardinality of the maximum matchings of planar graphs, A-612.
NITA, Valerian. Meromorphic functions whose global cluster sets contain regular points. Preliminary report, A-537.
NITSCHE, Johannes C. C. The higher regularity of liquid edges in aggregates of minimal surfaces, A-312; Contours bounding at most finitely many solutions of Plateau's problem, A-378.
NIVEN, Ivan. Polygonal coverings of the plane, A-136, A-389.
NOMIZU, Katsumi. See GRAVES, Larry.
NORDAHL, Thomas E. Residual finiteness of finitely-generated, left-commutative semigroups. Preliminary report, A-64.
NORRIS, Eugene M. Union-preserving homomorphisms of semigroups of relations. Preliminary report, A-224; Union preserving homomorphisms of semigroups of closed relations, A-625.
NORTON, Robert M. Application of moment properties to the arc sine law. Preliminary report, A-160.
NOVIKOFF, Albert. The development of probability theory in the early 20th century, A-27.
NUSSBAUM, Roger D. Generalizing the fixed point index. Preliminary report, A-239; Periodic solutions of special differential-delay equations. Preliminary report, A-424; Differential-delay equations with two time lags. Preliminary report, A-532.
NYIKOS, P. J. See BERNEY, E. S.
OBAID, S. A. See RUNG, D. C.
OBERLIN, Daniel M. Translation-invariant operators of weak type. Preliminary report, A-110.
O'CALLAGHAN, Liam. Properties of a topological product determined by small subproducts. Preliminary report, A-146.
O'CONNOR, Brian M. Isoparametric techniques in the finite element method. Preliminary report, A-275.
O'CONNOR, Thomas A. and ALF, Carol. Unimodality of the Lévy spectral function, A-161.
ODDSON, J. K. and METCALF, F. T. An asymptotic comparison theorem, A-475.
OEHRING, Charles. See COCHRAN, James A.
OGUZTORELI, M. N. See BONDARENKO, B. A.
---. See CHIRIACESCU, S. T.
---. See KRIVOSHEIN, L. E.
OKOH, Frank. A characterization of direct sums of canonical pencils of matrices. Preliminary report, A-419.
OLIGER, Joseph. Methods for time dependent partial differential equations, A-585; Algorithms based on additive splittings for hyperbolic equations with different time scales, A-643.
OLIKER, Vladimir. On the optimal ratio between the sample size and the number of variables in a linear regression model. Preliminary report, A-167.
OLIN, R. F. See BALL, J. A.
OLIN, Robert F. and THOMSON, James E. Lifting the commutant of a subnormal operator, A-577; Some index theorems for $\mathcal{L}_p(N)$. Preliminary report, A-578.
OLSEN, James H. and SHREVE, Warren E. Some positive contractions on L_2 with a common positive semifixed point. Preliminary report, A-126.
OLSON, Dwight M. and JENKINS, Terry L. Upper radicals generated by simple rings. Preliminary report, A-59.
OLSON, Roy C. A countably compact k'-space need not be countably bi-k, A-259.
O'NEIL, P. V. A simple proof of Menger's theorem, A-33.
ONNEWEER, C. W. Sets of divergence on a p-adic or p-series group, A-109.
ORDMAN, Edward T. and THOMAS, Barbara V. Smith. Sequential conditions and free topological groups. Preliminary report, A-72.
ORLIK, Peter. See SOLOMON, Louis.

ORR, Gilbert F. Semirings whose multiplicative semigroup is free. Preliminary report, A-43.
OSBORN, Howard. The Hopf ring, A-338.
OSBORN, J. Approximation of eigenvalues of nonselfadjoint operators. Preliminary report, A-169.
OSOFSKY, Barbara L. Projective dimension and subscripts of alephs, A-465.
OSONDU, Kevin E. Extensions of homomorphisms of a subsemigroup of a group, A-65.
OSTERBURG, James. Fixed rings of simple rings, A-419.
OSTROM, T. G. Some open questions as to the existence of kinds of translation planes, A-31.
---. See JOHNSON, N. L.
OTTAWAY, Malcolm. See BREWSTER, Ben.
OUTCALT, D. L. and YAQUB, Adil. A commutativity theorem for rings with polynomial constraints, A-464.
OUTLAW, Curtis. See SARAFYAN, Diran.
OWENS, Frank W. Enumeration of standard tableaus. Preliminary report, A-572.
OXTOBY, J. C. and PRASAD, V. S. Homeomorphic measures in the Hilbert cube, A-385.
PADMANABHAN, R. See GRÄTZER, G.
PALAGALLO, Judith. Continuous linear functionals on L^p-spaces, $0 < p < 1$, A-124.
PALMER, E. M. and SCHWENK, A. J. The number of self-complementary achiral necklaces, A-39.
PANAGOPOULOS, John G. Groups of automorphisms of standard wreath products. Preliminary report, A-520.
PANDA, Rekha. The reducible cases of certain hypergeometric functions of several variables. Preliminary report, A-293.
PANNATONI, Ronald F. An asymptotic result for Poisson's equation with a sheet density. Preliminary report, A-249.
PAO, Peter. See FINTUSHEL, Ronald.
PAPADAKIS, John S. and WOOD, David H. The Green's function of Helmholtz's equation in terms of two parabolic Green's functions, A-475.
PAPADOPOULOS, Alex S. The Burr distribution as a failure model, A-166.
PAPASTAVRIDIS, Stavros. A necessary condition for the imbedding of a complex in a Euclidean space. Preliminary report, A-21.
PAPICK, Ira J. Finite type extensions and coherence, A-7.
---. See DOBBS, David E.
PAPP, Z. Spectrum, topologies and sheaves for left noetherian rings. Preliminary report, A-463.
PAREEK, C. M. A study of finite-to-one and k-to-one mappings. Preliminary report, A-494.
PARK, Chull and SKOUG, David L. Wiener integrals over the sets bounded by sectionally continuous barriers, A-163.
PARK, Sehie. A generalization of a theorem of Janos and Edelstein. Preliminary report, A-397; Sequences of quasi-contractions and fixed points, A-442.
PARKER, G. Edgar. Semigroups of continuous transformations and generating inverse limit sequences, A-631.
PARKS, James M. On the topological monoid of self-equivalences, A-147.
PARSONS, T. D. See ALSPACH, Brian.
PASCUAL, Joaquin. See MARKANDA, Raj K.
PATTEN, Paul R. The refinable image of a 1-dimensional ANR. Preliminary report, A-556.
PAULOWICH, D. G. Trees are weakly contractible. Preliminary report, A-397.
PAUR, Sandra O. An estimate of the density at the boundary of an integral current modulo ν. Preliminary report, A-137.
PAYNE, L. E. On improperly posed Cauchy problems for partial differential equations, A-311.
PAYNE, Stanley E. Finite generalized quadrangles, A-133.
PAZY, A. See CRANDALL, Michael G.
PEARCE, Lynn, DURHAM, Stephen and SUMNER, David. Random walks on trees, A-3.
PEARSON, B. J. The Hahn-Mazurkiewicz theorem for hereditarily locally connected continua, A-264, A-401; Composants of nonmetric solenoids, A-303.
PECHLANER, Edgar. Geometrical meaning of the curvature scalar of a 3-space, A-548.
PECK, N. T. See KALTON, N. J.
PEDERSEN, F. D. See BYRD, R. D.
PELCZYNSKI, A. Bases, biorthogonal systems, and various approximation structures in Banach spaces, A-115.
PENICO, A. J. and STANOJEVIC, C. V. Some characterizations of inner-product spaces, A-123.
PENNEY, R. See GREENLEAF, F. P.
PERKEL, Manley. The bound on the valency of graphs with a transitive automorphism group and satisfying a certain uniqueness condition. Preliminary report, A-66.
PERRY, W. L. See LUNING, C. D.
PESEK, John D., Jr. Paley multiplier theorems for Hardy spaces of Euclidean space, the Ball and Vilenkin groups. Preliminary report, A-108.
PETERS, James V. Convolution transforms on $\mathbb{R}^n$. Preliminary report, A-13; Radon transforms over the complex domain. Preliminary report, A-111.
PETERS, Justin R. Automorphisms of locally compact groups, A-483.
PETERSON, Allan. Existence-uniqueness of solutions of k-point boundary value problems. Preliminary report, A-87.
PETRIDIS, Nicholas C. A general Picard type theorem, A-155.
PETRIE, Ted. Proper equivariant maps between representations of Lie groups. Preliminary report, A-340.
PETRYSHYN, W. V. Constructive solvability of nonlinear abstract and differential equations. Preliminary report, A-128.
PETTEY, Dix H. Products of R-closed spaces. Preliminary report, A-302; Feeble compactness and regular filterbases. Preliminary report, A-398.
PEYSER, Gideon. An operational structure for initial value problems. Preliminary report, A-485.
PHILIPP, Walter. A conjecture of Erdös and Gaal on the uniform distribution of lacunary sequences. II, A-6.
PHILLIPS, A. V. An illustration for Robert Wells' cobordism of immersions: 8 times Boy's surface ($\mathbb{P}^2 \subset \mathbb{R}^3$) is null-cobordant, A-334.
PHILLIPS, R. E. See HICKIN, K. K.
PHILLIPS, Ralph S. and LAX, Peter D. The time delay operator and a related trace formula. Preliminary report, A-640.
PHILLIPS, Thomas M. An example in Baire space embeddings, A-264.
PIACENZA, Robert J. Cohomology of fiber spaces. Preliminary report, A-146.
PICARDELLO, Massimo A. See FIGA'-TALAMANCA, Alessandro.
PICHORIDES, S. K. On a conjecture of Littlewood concerning exponential sums. Preliminary report, A-427.
PIERCE, R. S. Tensor products of countable Boolean algebras. Preliminary report, A-452.
PIGOZZI, Don. Finite groupoids without finite bases for their identities, A-371.
PIRANIAN, G. See BELNA, C.
PIRANIAN, George and WEITSMAN, Allen. Nonrectifiable level sets. Preliminary report, A-306.
PISIER, G. and ZINN, J. The central limit theorem in L^p ($p > 2$) and the log log law in Hilbert space, A-337.
PITTS, Jon T. Minimal surfaces on Riemannian manifolds, A-568.
PIXLEY, Carl P. See EATON, William T.
PIXLEY, Carl P. and VENEMA, Gerard A. On locally flat approximations of piecewise linear embeddings in codimension two. Preliminary report, A-153.
PLANT, Richard E. Constrained differential equations for the crustacean cardiac pacemaker, A-350.
PLATT, C. R. Finite transferable lattices are sharply transferable, A-527.
---. See GRÄTZER, G.
PLEMMONS, R. J. See NEUMANN, M.
PLESS, Vera. Self-dual codes, A-183.
PLUMMER, M. D. See LOVÁSZ, László.
POKRASS, David. Solvability in a class of generalized alternative rings. Preliminary report, A-415.
POLLARD, Harry. A new class of variational problems, A-329.
POMERANCE, Carl. On the distribution of amicable numbers, A-225.
POPPEN, Richard F. See TERLINDEN, David Mills.
PORTER, A. Duane. See MOUSOURIS, Nick.

PORTER, A. Duane and MOUSOURIS, Nick. Ranked solutions of the matrix equations $AX = B$, A-55; Ranked solutions of the matric equation $A_1X_1 = A_2X_2$. Preliminary report, A-462.
PORTER, J. F. See FELDMAN, W. A.
PORTER, J. F. and FELDMAN, W. A. The topology induced by relative uniform convergence, A-120.
PORTER, J. R. See DICKMAN, R. F.
PORTER, Jack and SHARMA, Prem. Invariance of continuity. Preliminary report, A-556.
POSNER, David. See JOCKUSCH, Carl G., Jr.
POSTON, Tim. Visualizing relativistic gravitation. Preliminary report, A-334.
POTTS, D. H. Inverting operations in axiom systems. Preliminary report, A-454.
POUCHER, William B. Group preserving block disjoint group divisible designs. Preliminary report, A-271.
PRANGER, Walter. Bounded sections of unitary bundles on a Riemann surface. Preliminary report, A-468.
PRASAD, V. S. See OXTOBY, J. C.
PRATHER, Carl. On the zeros of the derivatives of balanced trigonometric polynomials. Preliminary report, A-614.
PRENTER, P. M. Optimal L^2 and L^∞ error estimates for continuous and discrete least squares methods for boundary value problems, A-113.
PRESKENIS, Kenneth J. Integrating computer use into differential calculus, A-188.
PROULX, Ronald J. Spherical functions in S_n. Preliminary report, A-467.
PROULX, Viera K. Classification of the toroidal groups, A-452.
PRZYMUSIŃSKI, Teodor C. On the notion of n-cardinality, A-261; Products of perfectly normal spaces. Preliminary report, A-302.
---. See WAGE, Michael L.
PTÁK, V. See FIEDLER, M.
PUDLÁK, Pavel. See SPRINGSTEEL, Fred N.
PUDLÁK, Pavel and TŮMA, J. Every finite lattice can be embedded in a finite partition lattice, A-368.
PUTCHA, Mohan S. Word equations in geometric semigroups. Preliminary report, A-66.
PUTTASWAMY, T. K. Asymptotic solutions of a certain differential equation, A-310.
QUACKENBUSH, Robert W. The fraction of finite simple algebras in an equational class, A-2; An introduction to near-boolean algebras, A-454.
QUART, George. Fixed point formula for singular varieties. Preliminary report, A-53.
QUIGG, David L. Local limit theorem in the critical age-dependent branching process, A-164.
QUINE, J. R. The geometry of $p(S^1)$, A-10; Tangent winding numbers and branched mappings, A-156; On positively turning immersions, A-262; Some convex classes of typically real polynomials, A-470.
RABINOVITCH, I. Rank and dimension of partially ordered sets. Preliminary report, A-35.
RADFORD, David E. Commutative pointed Hopf algebras. Preliminary report, A-61.
RADJABALIPOUR, M. On equivalence of 2-decomposable and decomposable operators, A-488.
RAGADE, Rammohan K. Enumeration of distinct games in $2 \times 2 \times \cdots \times 2$ games, A-179.
RAKESTRAW, Roy M. See HANKINS, J. C.
RALL, Douglas F. A class of rings which are algebraic over the integers. Preliminary report, A-55.
RALL, L. B. Perturbation methods for the solution of linear problems, A-167.
RALSTON, James. See MAJDA, Andrew.
RAM, Jai. See GUPTA, R. N.
RAM, R. B. and VERMA, G. R. On the instability of nonlinear vibrations of beams with various boundary conditions, A-312.
RAMASWAMY, A. M. S. See VENKATARAMAN, R.
RAMM, Alexander G. Existence in the large of solution to nonlinear system of differential equations, A-17; Filtering of vectorial random nonstationary processes, A-235; Stable solution of an integral equation arising in applications, A-295.
---. See MISHNAEVSKY, P. A.
RAMOND, Pierre M. Local symmetries in physics, A-572.
RAMSEY, L. T. and WELLS, B. B. Some partial results on the $\mu * L^1$ question, A-110.
RANDELL, Richard. Complete intersections with $\mathbb{C}^*$-action, A-323.
RANGACHARI, M. S. See NATARAJAN, P. N.
RANGE, R. Michael. Hölder estimates for $\bar\partial$ on "degenerate balls" in $\mathbb{C}^n$, A-472.
RANKIN, Samuel M. Boundary value problems for partial functional differential equations. Preliminary report, A-95.
RAO, K. Nageswara. On the discriminant of an extension of the cyclotomic polynomial. Preliminary report, A-45.
RAO, N. V. Carlson's theorem for harmonic functions in $\mathbb{R}^n$, A-328.
RAO, N. V. and SHEA, Daniel F. Growth and Riesz mass of subharmonic functions of finite order. Preliminary report, A-327.
RAO, V. V. Identities involving Fourier coefficients of nonanalytic automorphic forms, A-309.
RAPHAEL, Marc. See FREEDMAN, Allen R.
RAPHAEL, Marc and SEMBER, J. J. Some further results on unconditional section boundedness, A-293.
RASMUSSEN, Carl H. Oscillatory and asymptotic behavior of systems of ordinary linear differential equations. Preliminary report, A-427.
RASMUSSEN, John R. The Artin index of irreducible characters of all finite metacyclic groups, A-67.
RASSIAS, Themistocles M. On the problem of Plateau for two contours, A-22; An answer to a question by V. V. Nemyckiĭ on the characterization of a pseudo-minimal set, A-264; A criterion for two Riemannian manifolds in the framework of global variational analysis to be isometric, A-394; Vector fields on smooth Banach manifolds, A-560.
RATCLIFFE, John G. Crossed extensions, A-305; On the second transgression of the Lyndon-Hochschild-Serre spectral sequence, A-564.
RATSCHEK, H. Centred forms of higher order. Preliminary report, A-18; The additive-multiplicative structure of interval arithmetic. Preliminary report, A-432.
RAUCH, J. See McKENNA, J. P.
RAUTENBERG, Wolfgang. The lattice of ramified modal and tense logics. Preliminary report, A-438.
RAVENEL, Douglas C. and WILSON, W. Stephen. Morava K-theories of Eilenberg-Mac Lane spaces and the Conner-Floyd conjecture. Preliminary report, A-498.
RAY, Sukomal Chandra. See DEBNATH, Lokenath.
RAYCHOWDHURY, P. N. See BOYD, J. N.
READ, D. R. Branchpoint covering theorems and n-pseudo-confluent mappings, A-303.
READ, Thomas T. Higher order differential expressions as polynomials in second order expressions, A-638.
READE, Maxwell O. See MILLER, Sanford S.
REBHUHN, D. On genericity and complements of measure zero sets in function spaces, A-560; On the stability of the existence of singular controls under perturbation of the control system, A-613.
REDDIEN, G. W. Difference approximations to control problems with functional arguments, A-167.
REDFIELD, R. H. T-groups. Preliminary report, A-41.
REDHEFFER, Ray. Mathematics with and without words, A-341.
REED, William J. Optimality criteria for the management of an animal population living in a stochastic environment, A-509.
REEDER, John and SHINBROT, Marvin. The initial value problem for surface waves under gravity, A-175.
REEKIE, G. M. A method of constructing normal collectionwise Hausdorff, not collectionwise normal spaces, A-139.
REHMER, Karl O. Completions of spaces of vector-valued measures. Preliminary report, A-75.
REICH, Jakob I. On the individual ergodic theorem for subsequences, A-25.
REICH, Simeon. A minimal displacement problem, A-243; Almost convergence and nonlinear ergodic theorems, A-293.
---. See BAILLON, J.-B.
---. See BRUCK, Ronald E.
REILLY, I. L. and VAMANAMURTHY, M. K. Compactness and finiteness, A-22.
REINER, Irving. Invariants of integral representations, A-226.

REMMEL, J. B. A r-maximal vector space that is not contained in any maximal vector space, A-252; On the lattice of r.e. superspaces of a r.e. space, A-299.
RENEKE, James A. Optimal control of an hereditary system, Preliminary report, A-631.
RESCO, Richard. Simple Noetherian rings and transcendence degrees, Preliminary report, A-531.
RETZLAFF, Allen. See KALANTARI, Iraj.
REZNICK, Bruce. Banach spaces which satisfy linear identities, A-124.
RHOADES, Billy E. Ten problems in summability, A-101; Fixed point theorems for a contractive type mapping, A-427; A general fixed point theorem, A-536.
---. See GHOSH, B. K.
RHOADES, Clark P. A multiplicity theory and decomposition theory for closed operators, Preliminary report, A-384.
RIBET, Kenneth. Interplay between classical modular forms and associated Galois representations, A-458.
RICH, Michael. On alternative rings with involution, Preliminary report, A-419.
RIEGER, G. J. A Gauss-Kusmin-Lévy theorem for the singular continued fractions of Hurwitz, A-234; On a certain class of nonlinear congruences, A-375.
RIEMENSCHNEIDER, S. See DeVORE, Ronald A.
RIERA, Gonzalo G. Algebraic quotients of Bergman domains, Preliminary report, A-293.
RIESS, R. D. and JOHNSON, L. W. Closed-form representations for errors of equidistant cubic spline approximations, Preliminary report, A-504.
RIETZ, Ronald E. Quotient fields of rational-sequence rings, A-459.
RIFFELMACHER, Dave. Sweedler's two-cocycles and an exact sequence, Preliminary report, A-225.
RINGEISEN, R. D. See BEINEKE, L. W.
RINGEL, C. M. See DLAB, V.
RIVAL, Ivan. See DUFFUS, Dwight.
RIVIERE, N. M. See CAFFARELLI, L. A.
ROACH, F. A. A note on representation and extension of linear fractional transformations, A-83.
ROAN, Raymond C. Composition operators on the space of functions with H^p-derivative, Preliminary report, A-82; Composition operators on Lip(α), Preliminary report, A-431.
ROARK, Charles Winfred. Separable criteria for G-diagrams over commutative rings, A-51.
ROBBINS, D. A. See KITCHEN, J. W.
ROBERTS, James. See CIMA, Joseph A.
ROBERTS, John. The degree sequences of asymmetric hamiltonian digraphs, A-34.
ROBERTSON, Muril. A change of metric technique for functional differential equations, A-274.
ROBINSON, Derek J. S. Outer automorphisms of torsion-free nilpotent groups, A-466.
ROBINSON, I. J. W. See BROWN, H. I.
ROBINSON, James E. Tridiagonal operators on Banach spaces with Schauder bases, Preliminary report, A-632.
ROBINSON, Raphael M. Undecidable tiling problems in the hyperbolic plane, A-490.
ROCKAFELLAR, R. Tyrrell. Monotone operators and Clarke's generalized gradients, Preliminary report, A-122; A generic characterization of optimality in nonconvex programming, Preliminary report, A-349.
ROCKWOOD, Alyn P. and BURTON, Robert P. An inexpensive technique for displaying algebraically defined surfaces, A-333.
RODABAUGH, S. E. Locally starlike decompositions of separable metric spaces, A-145; A lattice of continuities for fuzzy topological spaces, A-258.
ROGERS, J. W., Jr. See FORD, Jo.
ROITMAN, Judy. Some results about p-points and about paracompact box products, Preliminary report, A-260.
ROMAN, Steven M. The algebra of divided differences, A-563.
RORRES, Chris. A nonlinear model of population growth in which fertility is dependent on birth rate, A-180.
ROSE, Nicholas J. The Laurent expansion of a generalized resolvent, A-628.
---. See CAMPBELL, Stephen L.
ROSEN, Kenneth H. A congruence from Dedekind sums, A-47.
ROSEN, Ronald H. Regular neighborhoods of graphs in manifolds, A-395; Annularly equivalent triangulated suspension spheres in S^n, A-440.
ROSENBERG, Milton. Infinite variate wide-sense stationary Markov processes, A-316; Functional analysis for infinite-variate wide-sense processes, A-503.
ROSENBLATT, M. Some limit problems for Markov processes. Preliminary report, A-164.
ROSENBLATT-ROTH, Millu. Entropy of a random field, A-317.
ROSENCRANS, Steven I. Group theoretic calculation of Wiener integrals, A-159.
ROSENHOLTZ, Ira. There is no differentiable metric for R^n, A-395.
ROSENSTEIN, Joseph G. Recursive linear orderings, A-569.
ROSENTHAL, John W. See ASH, Chris.
ROSINGER, Elemer E. Nonlinear shock waves and distribution multiplication, A-235.
ROSKES, Gerald. On the disintegration of nonlinear gravity wave packets, Preliminary report, A-175.
ROSMOND, Thomas E. Global atmospheric modeling with spherical harmonics, A-352.
ROSS, Kenneth A. See CHILANA, Ajit K.
ROSS, Sharon Cutler. A classification of modules over discrete valuation rings, A-266.
ROSSER, J. Barkley. Use of hand held calculators in teaching calculus, Preliminary report, A-186.
ROSSI, H. See MORROW, J.
ROTA, Gian-Carlo. Recent progress in combinatorics, A-563.
ROTHE, Erich H. On the definition of the Leray-Schauder degree, A-124.
ROUSH, F. W. See KIM, K. H.
ROUSSEAU, C. C. and SHEEHAN, J. Ramsey numbers for books, A-629.
ROW, W. H. An algebraic characterization of connected sum factors of closed 3-manifolds, A-398.
ROWEN, Louis Halle. Central division algebras with involution of degree 8, A-229.
ROWEN, Louis Halle and SCHILD, Uri. A scalar expression for matrices with symplectic involution, A-229.
---. See COHEN, Miriam.
ROWLETT, Russell J. The fixed-point construction in equivariant bordism, A-635.
ROXIN, Emilio O. On terminal conditions in the wave game. Preliminary report, A-179.
RUBEL, Lee A. See ANDERSON, J. Milne.
---. See BECKER, Joseph.
RUBIN, Arthur L. Free complete Boolean algebras, Preliminary report, A-453.
---. See HOWARD, Paul E.
RUBIN, Herman. Infinite precision methods of generating random variables with specified distributions, Preliminary report, A-249.
RUBIN, Jean E. See HOWARD, Paul E.
RUBIN, L. R. See DICKMAN, R. F.
RUBIN, Matatyahu. Some results on Boolean algebras, A-621.
RUBIN, Mati. Vaught's conjecture for linear orderings, Preliminary report, A-390; On the homeomorphism groups of topological spaces and manifolds, A-443.
RUCKLE, William H. Schwartz topologies on Kothe sequence spaces, A-630.
RUDIN, Walter. Peak-interpolation manifolds of class C^1, A-473.
---. See NAGEL, Alexander.
RUDNICK, Karl. See BENNETT, Colin.
RUDOLPH, Lee. Knots of every type bound complex analytic curves. Preliminary report, A-54.
RUMELY, Robert S. Undecidability and elementary definability in the theory of global fields, A-550.
RUNDELL, William and STECHER, Michael. The supports of solutions of pseudoparabolic equations, A-477.
RUNG, D. C. and OBAID, S. A. Interpolating sequences with applications to σ-porous exceptional sets. Preliminary report, A-309.
RUOFF, D. and SHILLETO, J. R. Recursive n-gons, Preliminary report, A-136.
RUSSELL, Gary L. Two generator subgroups of SL(2, $\mathbb{C}$) and the modulus function. Preliminary report, A-226.

RUTTER, E. A. See BREWER, J. W.
RYSER, H. J. Indeterminates and incidence matrices. Preliminary report, A-344.
SACKS, Jonathan. Global analysis, minimal surfaces and Teichmüller theory, A-156.
SAFF, E. B. See VARGA, R. S.
SAFF, E. B. and VARGA, R. S. Sharpness of Lorentz's theorem on incomplete polynomials. Preliminary report, A-540.
SAHAI, Hardeo. A comparison of estimators of variance components in the two-way crossed random model, A-504.
SALBANY, Sergio. See ABIAN, Alexander.
SALEHI, H. See MIAMEE, A. G.
SALTER, Richard. Small time limit theorems for stationary independent increment processes, A-554.
SALTMAN, David J. Azumaya algebras with involution, A-463.
SALWACH, Chester J. See MEZZAROBA, Joseph A.
SAMPSON, Gary. Weak (1,1) estimates of singular convolutions and Fourier transforms, A-538.
SAMSKY, Stanley R. Finite covers and modules of functions, A-502.
SÁNCHEZ, David A. Linear age-dependent population growth with harvesting, A-508.
---. See KYNER, Walter T.
SANDS, B. See GRÄTZER, G.
SARAFYAN, Diran, DERR, Leroy and OUTLAW, Curtis. Generalizations of Euler-Maclaurin summation formulas. Preliminary report, A-275.
SARASON, Donald. See AXLER, Sheldon.
SARMA, I. Ramabhadra. See CHIVUKULA, R. Rao.
SASS, E. B. See VARGA, R. S.
SATTINGER, David H. Group theoretic methods in bifurcation theory, A-176.
SAVAGE, Thomas R. Generalized inverses in regular rings. Preliminary report, A-60.
SAVITCH, Walter J. Computational complexity of algorithms with parallel processing, A-644.
SAWOROTNOW, Parfeny P. Diagonalization of a self-adjoint A-linear operator, A-487.
SAWYER, Stanley. A limit law for patches in a geographically structured population. Preliminary report, A-647.
SCANLON, Jane Cronin. A bifurcation lemma. Preliminary report, A-120.
SCHAEFER, Thomas J. On the complexity of some two-person perfect-information games, A-173.
SCHARLEMANN, Martin. Approximating CAT CE maps. Preliminary report, A-354.
SCHATTSCHNEIDER, Doris J. The plane symmetry groups: Their recognition and notation, A-249; Tiling the plane with congruent pentagons: An update, A-490.
SCHECHTER, S. See ABLOW, C. M.
SCHEDLER, David A. A note on the Fréchet topology, A-317.
SCHEIBLICH, H. E. The coproduct of two rectangular bands, A-72.
SCHEIN, Boris M. Selfinjective inverse semigroups. Preliminary report, A-421.
SCHEINBERG, Stephen. Uniform approximation by functions analytic on a Riemann surface, A-469.
SCHIEFELBUSCH, Lary. Transfer and weakly closed subgroups, A-523.
SCHILD, Uri. See ROWEN, Louis Halle.
SCHMEELK, John F. A generalized Laplacian operators, A-306.
SCHMEICHEL, Edward F. Embedding hypergraphs in euclidean space. Preliminary report, A-627.
SCHMERL, James H. Extending models of arithmetic, A-255.
---. See LERMAN, Manuel.
SCHNUTE, Jon. Improved estimates from the Schaefer production model, A-509.
SCHOBER, Glenn. Applications of the calculus of variations for families of quasiconformal mappings, A-574.
---. See DUREN, Peter.
SCHOCHETMAN, Irwin E. On the integrated form of an induced Banach representation, A-111.
SCHOENBERG, I. J. On Landau's problem on bounds for derivatives, A-330.
SCHOLNICK, Allen S. Representability in categories without completeness and application. Preliminary report, A-62.
SCHÖNFELD, Wolfgang. Equations in finite proper relation algebras. Preliminary report, A-252.
SCHREIBER, B. M. See KUMAR, A.
SCHUMAKER, Larry L. On the Budan-Fourier theorem for splines, A-482.
SCHUSTER, Seymour. See BURNS, David.
---. See CHARTRAND, Gary.
SCHUUR, Jerry D. See ANICHINI, Guiseppe.
SCHWARTZ, Alan L. L^1-convolution algebras: Representation and factorization, A-161.
SCHWARTZ, Charles F. Generators for the group of rational solutions of $y^2 = x(x-1)(x-t^2-c)$. Preliminary report, A-322.
SCHWARTZ, Diane L. On hitting probabilities for an annihilating particle model, A-256.
SCHWARTZ, J. T. See DAVIS, Martin.
SCHWENK, A. J. See PALMER, E. M.
SCHWERDTFEGER, Hans. A generalization of the cross ratio, A-389.
SCOTT, Leonard L. Rational and generic cohomology, (with E. Cline, B. Parshall, and W. van der Kallen), A-67.
SCOTT, Ridgway. The use of Banach space interpolation in the theory of finite element methods, A-172.
SEELBACH, Marijean. Applications of order reduction methods to pilot modeling. Preliminary report, A-181.
SEGAL, Jack. Shape theory and ANR's. Preliminary report, A-499.
SEGERBERG, Krister. A completeness theorem in the modal logic of programs. Preliminary report, A-552.
SEIDEN, Esther. On the uniqueness of the minimal support for BIB design (8, 56, 21, 3, 6), A-609.
SEIDMAN, Thomas I. and MUNTEANU, Marie-Jeanne. A spline theoretic approach to input estimation with approximate observations. Preliminary report, A-168.
SEIFERT, C. J. The dual of Baernstein's space and the Banach-Saks property, A-118.
---. See DIESTEL, J.
SELDEN, Annie Alexander. The kernel of the determining endomorphism of a bisimple ω-semigroup, A-466.
SELDEN, John, Jr. Bisimple inverse semigroups whose idempotents form an interval. Preliminary report, A-466.
SELF, William M. An extension of Bernstein's theorem. Preliminary report, A-108.
SELFRIDGE, J. L. Some problems on the prime factors of consecutive integers, A-456.
---. See AIZLEY, Paul.
SELTZER, Stanley E. Closed ideals of $\tilde{S}$. Preliminary report, A-109.
SEMBER, John J. See FREEDMAN, Allen R.
---. See RAPHAEL, M.
SENECHAL, Marjorie L. Color groups. Preliminary report, A-510.
SETY, D. D. See LAKSHMIKANTHAM, V.
SGRO, Joseph. An application of topological model theory to Chang's modal logics, A-20.
SHAFER, Douglas. Planar gradient vectorfields with changing metrics. Preliminary report, A-155.
SHAFFER, Dorothy Browne. Starlikeness and convexity for a special class of meromorphic functions, A-80; Generalized equipotential surfaces and Green's function with finite pole, A-469.
SHAH, S. M. Analytic functions with some derivatives univalent and a related conjecture, A-79; Approximation to meromorphic functions on the positive real axis. II, A-328; Zeros of entire functions with univalent derivatives, A-426.
---. See FRICKE, G. H.
SHANKAR, Hari. Geometric mean of analytic functions. Preliminary report, A-82.
---. See ABORN, Bruce J.
SHANNON, David L. Invariants of inertial K-automorphisms of K[X, Y] and K[[X, Y]]. Preliminary report, A-319.
---. See EAKIN, Paul.
SHAPIRO, H. L. and SMITH, F. A. Classes of locally finite collections. Preliminary report, A-145.
SHAPIRO, Victor L. Pressure, capacity, and the Navier-Stokes equations, A-476.
SHARMA, A. Cardinal discrete splines, A-479.
SHARMA, Prem. See PORTER, Jack.

SHARP, Jack C. Antiregular semigroups, Preliminary report, A-266.
SHARP, Thomas J. Certain properties of projection-invariances. Preliminary report, A-3; A remark on projection-invariance. Preliminary report, A-265.
SHARPE, Michael J. Some applications of Markov additive functionals, A-352.
SHARPLEY, Robert C. On the failure of a bilinear Marcinkiewicz theorem, A-541.
---. See DeVORE, Ronald A.
SHAVEL, Ira. $|H^2(U, Z)_{tor}|$ for some general type surfaces. Preliminary report, A-54.
SHEA, Daniel F. See RAO, N. V.
SHEEHAN, J. See ROUSSEAU, C. C.
SHELAH, Saharon. A Kurosh problem and related problems, A-1; Various results in mathematical logic, A-250; Moore spaces, club, Banach space with few operators existentially closed groups in continuun, and diamond, A-549.
---. See GUREVICH, Yuri.
---. See HILLER, Howard L.
SHEPHARD, G. C. See GRÜNBAUM, B.
SHERK, F. A. The indicator sets of finite translation planes. Preliminary report, A-134.
SHERWOOD, Howard. The relationship between two classes of random normed spaces. Preliminary report, A-164.
SHIEH, Narn-R. See CHEN, Jau-D.
SHIELDS, A. L. and WILLIAMS, D. L. Growth of harmonic conjugates in the unit disc, A-80.
SHIELDS, Paul C. and NEUHOFF, D. L. A channel representation theorem, A-545.
SHILLETO, J. R. See RUOFF, D.
SHINBROT, Marvin. See REEDER, John.
SHONKWILER, R. Cell mitochondria studied as a branching process, A-180; Bellman-Harris branching processes with immigration, A-632.
---. See CHRISTENSEN, Mark J.
SHOOK, T. W., II. The space of regular scientific functions, A-74.
SHORE, Richard A. A decidable class of two quantifier sentences in the theory of the recursively enumerable degrees. Preliminary report, A-436.
SHOWALTER, David W. Eigengenerators for Hermitian matrices, A-432.
SHOWERS, Donald K. See BLAIR, David E.
SHREVE, Steven E. and BERTSEKAS, Dimitri P. Dynamic programming in Borel space. Preliminary report, A-181.
SHREVE, Warren E. See OLSEN, James H.
SHUCK, John W. Gaussian coefficients and cyclotomic polynomials, A-45.
SHULT, Ernest E. Incidence systems related to generalized quadrangles and hexagons. Preliminary report, A-134.
SIBONY, Nessim. Peak sets in pseudoconvex domains, A-275.
---. See GAMELIN, T. W.
SIEGEL, Jerrold. β-representable homotopy functors, A-340.
SILVERMAN, Herb. Subclasses of univalent functions, A-78.
SILVERT, William and SMITH, William R. The variability of discrete ecosystem models, A-510.
SILVIA, Evelyn Marie. A note on special classes of p-valent functions. Preliminary report, A-81; Subclasses of spiral-like functions. Preliminary report, A-429.
SIMMONS, Steven M. Restricted translation of measures on groups, A-484.
SIMÕES-PEREIRA, J. M. S. Matroids and graphs, A-625.
SIMON, L. See ALMGREN, F. J., Jr.
SIMONS, Roger A. Structuring Boolean algebras using systems of refinements. Preliminary report, A-446.
SIMS, Charles C. See LEON, Jeffrey S.
SINGH, Bhagat. Vanishing nonoscillations of Lienard type retarded equations. Preliminary report, A-89.
SINGH, K. L. A note on the sequence of iterates of generalized contraction mappings. Preliminary report, A-9; Fixed and common fixed points in convex metric spaces, A-425; Fixed point theorems for contractive type mappings, A-542; Fixed and common fixed points for two mappings. Preliminary report, A-622.
SINGH, S. A linking axiom, retracts, and factors of E^{n+1}, A-557.
SINGH, Surjeet. Modules over hereditary noetherian prime rings, A-611.
SINGHI, N. M. See FOLDES, S.
SJERVE, Denis. Generalized homological reduction theorems. Preliminary report, A-499.
SKARDA, R. Vencil. A generalization of $(\Sigma a_i^2)^{\frac{1}{2}} \leq \Sigma |a_i|$, A-324.
SKOUG, David L. See PARK, Chull.
SLATER, Peter J. Centers to centroids in graphs, A-522.
---. See ENTRINGER, R. C.
SLOANE, Neil J. A. Self-dual codes and geometry, A-184.
---. See MacWILLIAMS, Jessie.
SMALL, Charles. Sums of powers in large finite fields, A-8; Solution of Waring's problem mod n, A-47.
SMITH, David A. See DERSHEM, H. L.
SMITH, David A. and FORD, William F. Acceleration of linear and logarithmic convergence, A-168.
SMITH, F. A. See SHAPIRO, H. L.
SMITH, H. F. See KLEINFELD, Erwin.
SMITH, Harvey A. Central twisted group algebras, A-110.
---. See BUSBY, Robert C.
SMITH, James C. A remark on preparacompactness. Preliminary report, A-139; Cover characterizations for expandable spaces. Preliminary report, A-495.
SMITH, Justin R. Complements of codimension-two submanifolds. I. The fundamental group, A-258; Homology surgery theory and perfect groups, A-288; Acyclic localizations, A-367; Complements of codimension-two submanifolds. II. Homology below the middle, A-440.
SMITH, Kirby C. See MAXSON, C. J.
SMITH, Philip W. See BARROW, David L.
SMITH, R. T. Elliptic complexes and Poincaré lemma, A-95.
SMITH, Richard F. Even unimodular hermitian forms. Preliminary report, A-44.
SMITH, Ronald K. Integral representation of the symmetric group Sn. Preliminary report, A-66.
SMITH, William R. See SILVERT, William.
SMITH, William W. Properties of overrings which produce invertibility of a given ideal. Preliminary report, A-267.
SMOLLER, J. A. See CONWAY, E. D.
SMYTHE, R. T. First-passage percolation on the square lattice, A-647.
SNAITH, Victor P. Some new elements in the stable homotopy of BO, A-338.
SNIDER, R. L. See ARMENDARIZ, E. P.
SNOW, Donald R. Generating function for sums of powers of integers by functional equations, A-37; A set of two-variable polynomials generalizing Bernoulli's polynomials and numbers, A-448.
SNYDER, Herbert H. An improvement on Nicholson's formula for Bessel functions of the first kind, A-10; A function-theoretical structure associated with the one-dimensional diffusion equation, A-84.
SOLDERITSCH, James. Polynomials which produce imaginary quadratic number fields with high p-rank. Preliminary report, A-49.
SOLOMON, Alan D. The applicability and extendibility of Megerlin's method for solving parabolic free boundary problems, A-544.
SOLOMON, J. L. Contractive mappings and attractors for compact sets. Preliminary report, A-143.
---. See JANOS, L.
SOLOMON, Jay M. See CIMENT, Melvyn.
SOLOMON, Louis and ORLIK, Peter. Automorphism groups of forms, A-341.
SOMMESE, Andrew John. Theorems of Barth-Lefschetz type for complex subspaces of homogeneous complex manifolds, A-470.
SONS, L. R. Another growth indicator for the study of value distribution. Preliminary report, A-328.
SONTAG, Eduardo D. Jet sufficiency for observability of certain nonlinear systems. Preliminary report, A-546.
SPERBER, Steven. Congruence properties of the Hyperkloosterman sum. Preliminary report, A-49.
SPIKES, Paul W. Limit-circle type criteria for nonlinear differential equations, A-273.

---. See GRAEF, John R.
SPRAGUE, Alan. 3-nets, A-531.
SPRECHER, David A. On uniform best approximations with superpositions, A-483.
SPRINGSTEEL, Fred N. and PUDLÁK, Pavel. Time complexity of mechanized hypothesis formation. Preliminary report, A-173.
SPRUCK, Joe. See KINDERLEHRER, David S.
SQUIRES, W. A. See ANDERSON, J. M.
SRIVASTAVA, H. M., LAVOIE, J.-L. and TREMBLAY, Richard. The Rodrigues type representations for a certain class of special functions. Preliminary report, A-238.
STAFFORD, J. T. A simple Noetherian ring not Morita equivalent to a domain, A-464.
STAFNEY, James D. A density property of eigenfunctions, A-638.
STAHL, Saul. Multicolorings of outerplanar and line graphs. Preliminary report, A-189.
STAHL, Stanley H. A generalization of constructibility in set theory, A-30.
STALLINGS, John R. Fibred links, A-355.
STANEK, Jean Chan. A Krasnosel'skiĭ-type theorem involving p-arcs in the Euclidean plane, A-250.
STANOJEVIĆ, Č. V. See GUCCIONE, S. J.
---. See PENICO, A. J.
STANTON, Dennis. A product formula for q-Hahn polynomials. Preliminary report, A-86.
STANTON, Robert J. and TOMAS, Peter A. Some estimates on spherical functions and their applications, A-109.
STARBIRD, Michael. The Alexander linear isotopy theorem in E^3. Preliminary report, A-153.
STARK, Richard. An application of Martin's axiom in group theory. Preliminary report, A-68.
STASHEFF, James. See HALPERIN, Stephen.
STECH, Harlan W. On the adjoint theory for autonomous linear functional differential equations with unbounded delays. Preliminary report, A-89.
STECHER, Michael. See RUNDELL, William.
STEEG, Manfred. Finite p-groups with trivial Schur-multiplier. Preliminary report, A-68.
STEEL, Christopher A. A Wiener-Lévy theorem for nuclear integral operators, A-113.
STEIGER, W. L. Evaluating numerical algorithms. Preliminary report, A-170.
STEIN, E. M. Some problems for multipliers in $\mathbb{R}^n$, A-107.
STEIN, Junior. Singular quadratic functionals for multiple integral problems in the calculus of variations. Preliminary report, A-132; Conjugate gradient algorithms in non-Hilbertizable Banach spaces, A-346.
STEIN, Michael R. Whitehead groups of finite groups, A-320.
STEIN, Sherman K. Tiling by translates of unions of cubes, A-490.
STEINBERG, Richard. Grötzsch's theorem for the projective plans. Preliminary report, A-227.
STEINER, Ray. See BLASS, Josef.
STEMPLE, Joel. Geodetic graphs homeomorphic to a complete graph. Preliminary report, A-417.
STENGER, Frank. Optimum convergence of minimum norm approximations in H_p, A-478.
STEPP, James W. See BYRD, Richard D.
STERN, Ronald J. On infinite dimensional cores. Preliminary report, A-314.
STERNFELD, Robert. A contractible open n-manifold that embeds in no compact n-manifold. Preliminary report, A-277.
STOLL, Wilhelm. A Casorati-Weierstrass theorem for Schubert zeroes. Preliminary report, A-471.
STOLTZFUS, Neal W. Metabolic, split and hyperbolic equivariant inner product spaces and their geometric parallels: The double null concordance group of knots, A-633.
STOUT, Quentin F. Schur products of operators and the essential numerical range, A-16; Convex ideals of $\mathcal{B}(\mathcal{H})$. Preliminary report, A-129.
STRAIGHT, H. Joseph. See FINK, John Frederick.
STRAIGHT, H. Joseph and LESNIAK-FOSTER, Linda. The cochromatic number of a graph, A-39.
STRALKA, Albert. Congruences on compact Lawson semilattices, A-268.
STRANG, Gilbert. Linear programming governed by differential equations, A-178.
STRATIGOS, P. Extensions of additive set-functions, A-17.
STRAUS, E. G. See GOLDBERG, Moshe.
STRAUSS, Charles M. See BANCHOFF, Thomas F.
STRAUSS, Walter. See COOPER, Jeffery.
STRAZDINŠ, Indulis. Complexity of the affine prototype classes of five-variable boolean functions, A-547; Affine prototype classes of two-variable three-valued Post functions, A-618.
STREIT, Roy L. An algebraic representation of finite dimensional L_{2p} norms. Preliminary report, A-486.
STRELITZ, Sh. and ABRAMOVICH, S. The universal problem of eigenvalues of linear differential operators and their existence, A-242.
STUCKWISCH, Stephen and HELTON, Jon. Approximation of nonlinear operations, with an application to the Runge-Kutta equations. Preliminary report, A-170.
SUBRAMANIAN, P. K. A norm for γ-linear operators on two-norm spaces. Preliminary report, A-122.
SUCHESTON, L. See AKCOGLU, M. A.
---. See EDGAR, G. A.
---. See GHOUSSOUB, N.
---. See KRENGEL, Ulrich.
SULLIVAN, Francis. Smoothness and reflexivity, A-15.
SUMNER, David. See PEARCE, Lynn.
SUMNERS, D. W. See HITT, L. R.
SUN, Hugo S. Generalized incidence relations and matrices. Preliminary report, A-136.
SUNDAY, Daniel M. An algebraic bifurcation, A-228; A nonlinear representation of shape for machine vision. Preliminary report, A-553.
SUNDER, V. S. Unitary orbits of integral operators, A-639.
SUNG, Chen-Han. On H. Cartan's conjecture on a system of holomorphic functions, A-158.
SUNLEY, Judith S. Generalized genus characters. Preliminary report, A-46.
SUROWSKI, D. B. Representations of a subalgebra of the generic algebra corresponding to the Weyl group of type F_4, A-64.
SURYANARAYANA, D. On a theorem of Apostol concerning Möbius functions of order k, A-44; On (k, r)-integers in an arithmetic progression and a problem in additive number theory, A-223; On the distribution of some generalized square-full integers, A-270; On some asymptotic formulae of S. Wigert, A-371; On the functional equation $S(m,n)F(n/(m,n)) = F(n)h(n/(m,n))$, A-413; On a functional equation relating to the Brauer-Rademacher identity, A-524; On a functional equation relating to Landau's identity, A-608.
SUSSMANN, Hector J. Subanalytic sets and feedback controls. Preliminary report, A-314.
SUTHERLAND, Pat. Boundary value problems for random differential equation, A-90.
SVERDLOVE, Ronald. Polynomial systems in the plane with centers. Preliminary report, A-90; Vector fields defined by complex functions. Preliminary report, A-638.
SWANSON, Laif. Factors of Bernoulli shifts, A-162.
SWANSON, Richard C. Intersection theory and boundary deformation problems. Preliminary report, A-155.
SZABO, Manfred Egon. Boolean aspects of structured categories: a deductive approach, A-448.
SZEPTYCKI, Pawel. A variant of g-function of Littlewood-Paley, A-123.
SZETO, George. The structure of semiperfect rings, A-56.
TALIAFERRO, Steven D. Asymptotic behavior of decreasing solutions of $y'' = \varphi(t)y^{\lambda}$. Preliminary report, A-88.
TALL, Franklin D. Weakly collectionwise Hausdorff spaces, A-24.
---. See BROVERMAN, S.
TALWAR, Sudha. Pure and neat submodules of modules over (hnp)-rings. Preliminary report, A-422.
TANIS, Elliot A. A computer-based laboratory for mathematical statistics and probability, A-185.
TAFIA, Richard A. Some contributions to the theory of numerical methods via infinite dimensional formulations of finite dimensional problems, A-172.
TARDIFF, Robert M. On a functional inequality arising in the construction of the product of several metric spaces.

Preliminary report, A-74.
TARSKI, Alfred. See GIVANT, Steven.
---. See NG, Kan Ching.
TAYLOR, Alan D. See BAUMGARTNER, James E.
---. See HINDMAN, Neil.
TAYLOR, B. A. See ANDERSON, J. M.
TAYLOR, G. D. See KAUFMAN, E. H., Jr.
TAYLOR, James G. and COMSTOCK, Craig. Error bounds for the Lanchester equations with variable coefficients, A-92.
TAYLOR, Jean E. The geometry of soap films and crystals, A-565.
TAYLOR, Keith. See BAGGETT, Larry.
TAYLOR, Laird. Contractive mappings without fixed points, A-649.
TAYLOR, Laurence R. A bordism spectral sequence. Preliminary report, A-340.
TAYLOR, M. A. See KANNAPPAN, Pl.
TAYLOR, Walter. Cohomology rings of topological algebras, A-372; Congruence representation of modular lattices, A-420; Topological algebras in congruence-k-permutable or congruence-modular varieties, A-612.
TEPPER, David E. and WILDENBERG, Gerald. Some free boundary problems. Preliminary report, A-85.
TERASAWA, Jun. $N \cup R$ and their dimensions. Preliminary report, A-262.
TERLINDEN, David Mills and POPPEN, Richard F. The disk jockey problem, A-233.
TEWARI, K. See WANGNEO, C. L.
THAYER, F. Javier. See HOFMANN, Karl H.
THO, Vo Van. See de KORVIN, Andre.
THOLEN, Ronald. See BALLEW, David.
THOMAS, Barbara V. Smith. See FAY, Temple H.
---. See ORDMAN, Edward T.
THOMPSON, R. C. Similarity invariants for principal submatrices, A-343.
THOMSON, James E. See BALL, J. A.
---. See OLIN, Robert F.
THRASH, Joe. A modification of the generalized G-transform, A-388.
TILLSON, Tim. A Hamiltonian decomposition of K^2_{2m}, $2m \cong 8$. Preliminary report, A-291.
TINSLEY, Frederick. Cell-like decompositions of manifolds. Preliminary report, A-152.
TODD, Olga Taussky. Integral group matrices, A-345.
TOLLEFSON, Jeffrey. See HEIL, Wolfgang.
TOMAS, Peter A. Some problems on invariant multipliers. Preliminary report, A-106; A restriction theorem for the Fourier transform, A-326.
---. See STANTON, Robert J.
TOMBRELLO, Jeff. See WARNE, Ronson J.
TOMSISON, J. D. See BRACE, J. W.
TONDRA, Richard J. Homeotopy groups of surfaces whose boundary is the union of 1-spheres, A-23.
TOOMER, Graham. Some excision theorems for nilpotent spaces. Preliminary report, A-148.
TORCHINSKY, A. See CALDERÓN, A. P.
TRAPP, George E. See ANDERSON, William N., Jr.
TRAWINSKI, B. J. Sampling distributions of a distance function. Preliminary report, A-439.
TREBELS, Walter. See GASPER, George.
TREGER, Robert. On p-torsion in etale cohomology, A-6.
TREMBLAY, Richard. See SRIVASTAVA, H. M.
TRENCH, William F. Interpolating the square of one oscillatory function at the zeros of another. Preliminary report, A-86.
TRETKOFF, Marvin. Road maps for Riemann surfaces and the Jacobian variety of the Klein-Hurwitz surface. Preliminary report, A-321.
TREYBIG, L. B. Bounds related to the equivalence of polygonal knots in E^3, A-152.
---. See BOROSH, I.
TRIMBLE, Selden Y. and WRIGHT, Donald J. Close-to-convex functions and their extreme points in Hornich space, A-78.
TROMBA, A. J. On the number of solutions to the classical problem of Plateau, A-158.
TROTTER, Hale F. Galois groups for some elliptic modular curves, A-49.
TROUTMAN, J. See JURKAT, W.
TRUSHIN, David S. See ALLEN, Harry P.
TRUTT, D. See GHOSH, B. K.
TSARPALIAS, Athanasios. A combinatorial theorem with applications in set-theory and functional analysis. Preliminary report, A-538.
TSAY, J. See LORD, M. E.
TSUI, Sze-Kai J. On generators of semigroups of positive linear mappings on C^*-algebras, A-120.
TUCCI, Ralph. The Krull radical. Preliminary report, A-62.
TUCKER, Thomas W. Two-generator kleinian groups are free. Preliminary report, A-497.
TUCKWELL, Henry C. See MIURA, Robert M.
TULANE, Louis S. U. Introduction to the special session on topological algebra and continuous lattices, A-270.
TŮMA, J. See PUDLÁK, P.
TURETT, Barry. Fenchel-Orlicz spaces, A-113.
TVRDY, M. See BROWN, R. C.
TYMCHATYN, E. D. On hereditarily locally connected continua, A-24.
---. See GRISPOLAKIS, J.
TZANAKIS, Nikos. Circularly convex sets, A-548.
TZIMBALARIO, Jean. See LORCH, Lee.
UBHAYA, Vasant A. Approximation by starshaped functions. Preliminary report, A-242.
UCCELLA, Giovanni. See MAGGIOLO-SCHETTINI, Andrea.
UHLENBECK, Karen K. Variational problems on manifolds with a conformal structure, A-583.
UTZ, W. R. A second order differential equation of T. Otsuki, A-87.
VAALER, Jeffrey D. See BENNETT, Colin.
VAMANAMURTHY, M. K. See REILLY, I. L.
VAN BUSKIRK, James M. Kawauchi's conjecture for strongly amphicheiral knots, A-354.
van DOUWEN, Eric K. Separation and covering properties of box products and products, A-145; $4 \times \beta X$, A-442; Subcontinua and nonhomogeneity of $\beta \mathbb{R}^+ - \mathbb{R}^+$. Preliminary report, A-559.
van DOUWEN, Eric K. and LUTZER, D. J. Stationary sets in cardinals. Preliminary report, A-139.
VANHECKE, Lieven. See WATSON, Bill.
VAN IWAARDEN, John L. Computer techniques for ordinary differential equations. Preliminary report, A-186.
van MILL, Jan. See BELL, Murray G.
VAN REES, G. H. John. A lower bound for the number of rows in a permutation array of index 1, A-223.
VARADARAJAN, K. Finiteness obstruction for nilpotent spaces, A-496.
VARAH, James M. Numerical methods for the solution of ordinary differential equations, A-584.
VARGA, R. S. See SAFF, E. B.
VARGA, R. S. and SASS, E. B. Rational approximations of e^z and applications, A-105; Rational approximations to e^z and applications, A-278.
VASCONCELOS, W. V. Generating modules extravagantly. Preliminary report, A-318.
VAUGHAN, J. E. A weak version of property D. Preliminary report, A-560.
VAUGHAN, N. H. and YEAGY, R. W. Factoring ideals into semiprime ideals, A-51.
VAYO, H. Westcott. An exact solution to the Navier-Stokes equations, A-175.
VENEMA, Gerard A. Approximating disks in 4-space, A-153.
---. See EATON, William T.
---. See PIXLEY, Carl P.
VENKATARAMAN, R. and RAMASWAMY, A. M. S. Some algebraic structures on fuzzy sets. II. Preliminary report, A-368.
VERHEIDEN, Eric. Completions of integral matrices. Preliminary report, A-342.
VERMA, A. and JOSHI, C. M. Some remarks on a paper by M. E. Cohen, A-534.
VERMA, G. R. See RAM, R. B.
VERMA, H. K. Transport, diffusion and degradation of organic matter in a river-A theoretical solution, A-265.
VERMA, S. On a rotation of Pascal's triangle giving the number of terms in a multinomial expansion. Preliminary report, A-344.
VERSCHOREN, A. A note on the Van Geel-spectrum. Preliminary report, A-525.
VINARDI, Giuliana. See GATTESCHI, Luigi.

VINOD-KUMAR. Compactification of a convergence space, A-262.
VITALE, Richard A. Projection on re-arrangements of a function, A-167.
VOLGER, H. Σ^1_1-relations of structures and interpolation for sentences. Preliminary report, A-392.
VOHRA, Chandan. On E-C-monotone operators. Preliminary report, A-548.
VOTRUBA, George F. The extremal generalized inverse and the metric generalized inverse. Preliminary report, A-128.
VREM, Richard. Harmonic analysis on compact hypergroups. Preliminary report, A-484.
WADLAND, Kenneth R. Double commutants of $C_{.0}$ contractions, A-534.
WADSWORTH, Adrian R. Krull dimensions of tensor products of commutative algebras over a field, A-531.
WAGE, Michael L. and PRZYMUSIŃSKI, Teodor C. The dimension of product spaces, A-264.
WAID, Margaret C. A finite element model for blood flow in atherosclerotic arteries. Preliminary report, A-181.
WAJDA, Louis W. Collapsing of $K \times I^n$. Preliminary report, A-260.
WALCH, Ray. See JORDAN, James.
WALKER, Philip W. Orthogonal projections onto the graphs of certain differential operators, A-93.
WALL, Curtiss E. See LICK, Don R.
WALLS, Gary. See BERTHOLF, Dennis.
WALTER, Colin D. A class number relation in Frobenius extensions of number fields, A-374.
WALTER, Wolfgang. See ACKER, Andrew.
WALTON, Ian G. Saddle points and the Ritz algorithm for certain singular equations. Preliminary report, A-14.
---. See LANDESMAN, E. M.
WAN, Frederic Y. M. Exhaustible resources and intergenerational equity. Preliminary report, A-507.
WAN, Y. H. On the accessibility of local Pareto optima with constraints. Preliminary report, A-158.
WANG, Da-Lun and WANG, Ping. Some results about the Chvátal conjecture, A-449.
WANG, Hao. A class of tiling problems, A-451.
WANG, James L. Approximation on boundary sets. Preliminary report, A-399.
WANG, Peter C. C. See BLEICK, Willard E.
WANG, Ping. See WANG, Da-Lun.
WANG, Stuart S. Free cubic extensions over commutative rings. Preliminary report, A-52.
WANGNEO, C. L. and TEWARI, K. Right noetherian rings integral over their centers. Preliminary report, A-524.
WANNIER, Milton. The Wannier spectrum, A-376.
WARD, Harold N. Combinatorial polarization and association schemes, A-183.
WARD, James F. On a limit formula for weighted pseudoinverses, A-461.
WARD, James R. Boundary value problems for differential equations in a Banach space. Preliminary report, A-91.
WARD, Joe. See LEGG, David.
WARFIELD, Robert B. Efficient generation of modules and stable equivalence of matrices, A-465.
WARMING, R. F. and BEAM, Richard M. Stability properties of implicit approximate factorization schemes for hyperbolic and parabolic equations. Preliminary report, A-645.
WARNE, Ronson J. Left natural regular semigroups, A-8; Natural locally inverse semigroups, A-221; Natural $\mathcal{L}$-unipotent semigroups, A-287; Cliffordian semigroups, A-376; Split extensions and a class of bisimple semigroups, A-413; A class of bisimple inverse monoids. Preliminary report, A-522; Natural completely 0-simple semigroups. Preliminary report, A-607.
WARNE, Ronson J. and LA FRANCE, Jane. Natural orthodox semigroups. I, A-423; Natural orthodox semigroups. II, A-523; Split extensions and a class of simple semigroups. I, A-607.
WARNE, Ronson J. and LOOMIS, Irene. Standard regular semigroups. II. Preliminary report, A-523.
WARNE, Ronson J. and TOMBRELLO, Jeff. Standard Cliffordian semigroups. Preliminary report, A-525.
WARNER, Hoyt D. Derived faces of a wedge and the closure of its set of positive operators. Preliminary report, A-54.
WARREN, Joseph and KOGELMAN, Stanley. Techniques for reducing math anxiety, A-187.
WARREN, Richard H. Discrete sets, A-495.
WASON, James R. Curvature of product 3-manifolds. Preliminary report, A-569.
WASON, Judith C. On infinite Nielsen kernels. Preliminary report, A-567.
WATKINS, J. J. See BREWER, J. W.
WATSON, Bill and VANHECKE, Lieven. A necessary and sufficient condition that the fibres of an almost semi-Kähler submersion be almost semi-Kähler, A-137.
WAYMIRE, Ed. Gibbsian equilibria for the speed change with exclusion interaction, A-161.
WEBB, Cary. See GIBBONS, Joel C.
WEBB, Cary and GIBBONS, Joel. The inversive group of S^n, A-335.
WEBB, William A. Uniform distribution of recurrence sequences of algebraic integers. Preliminary report, A-455.
WEBER, Robert J. Attainable sets of quasiconcave markets, A-179.
WEBSTER, Dallas E. General chaos, A-425.
WEBSTER, S. M. On the mapping problem for algebraic real hypersurfaces, A-473.
WEINBERG, Bernard C. See CIMENT, Melvyn.
WEINBERGER, H. F. See ARONSON, D. G.
WEINER, Joel L. Surfaces, especially hyperbolic surfaces, in E^4. Preliminary report, A-493.
WEINSTEIN, Alan. Eigenvalues of the Laplacian plus a potential. Preliminary report, A-442.
WEISMAN, Carl S. Some congruences for binomial coefficients, A-455.
WEISS, Gary. The Fuglede commutativity theorem modulo operator ideals, A-240; The Fuglede commutativity theorem modulo the Hilbert-Schmidt class and generating functions for matrix operators, A-292; Fuglede's commutativity theorem modulo the Hilbert-Schmidt class and generating functions for matrix operators. II, A-382.
WEISS, Neil A. See CRANWELL, Robert M.
WEISSLER, Fred B. Logarithmic Sobolev inequalities for the heat-diffusion semigroup on R^n, A-117.
WEITSMAN, Allen. On spread-type relations in the theory of functions, A-580.
---. See PIRANIAN, George.
WELLS, B. B. See RAMSEY, L. T.
WELLS, Daniel R. A result on multivariate unimodal distributions, A-166.
WELLS, James H. See WILLIAMS, Lynn R.
WEN, Shih-liang. An eigenvalue problem in fluid dynamics, A-175.
WENGER, Ronald H. Finite commutative semigroups having Frobenius semigroup algebras. Preliminary report, A-467.
WENJEN, Chien. A new proof of a theorem for changing variables in multiple integrals, A-294.
WENTE, Henry C. The stability of the axially symmetric pendent liquid drop, A-575.
WERNER, H. See DAVEY, B. A.
WETTE, Eduard W. Untruth and explicit end of elementary computations, A-373.
WETZEL, John E. See ALEXANDERSON, G. L.
WHEELER, Lewis. Uniqueness of solutions to the displacement problem of nonlinear dynamical elasticity, A-95.
WHEELER, William H. Model-complete theories of pseudo-algebraically closed fields, A-391.
WHITE, A. See DIMINNIE, C.
WHITE, Arthur T. See KAINEN, Paul C.
WHITE, H. E., Jr. Example 1, A-260.
WHITESIDES, S. H. On collineations of order 10 projective planes, A-135.
WICKE, Howard H. Inverse invariance theorems for complete mappings, A-143.
WICKE, Howard H. and WORRELL, John M., Jr. On σ-scattered q-spaces, A-25.
WIDOM, Harold. Asymptotic expansions of determinants for families of trace class operators, A-380; Eigenvalue distribution theorems on certain homogeneous spaces, A-648.

WIEGAND, Roger and WIEGAND, Sylvia. Commutative rings all of whose finitely generated modules are direct sums of cyclics, A-319.
WIEGAND, Sylvia. See WIEGAND, Roger.
WIETING, Thomas W. N-chromatic plane ornaments ($1 \leq N \leq 60$), A-491.
WIGGINS, Gary L. Harmonic analysis on algebras. Preliminary report, A-111.
WIGGINS, Kenneth L. Successive approximations to solutions of Volterra integral equations, A-103.
WILANSKY, Albert. A factorization theorem in summability, A-100.
WILDENBERG, Gerald. See TEPPER, David E.
WILF, Herbert S. A global bisection method for computing the zeros of polynomials in the complex plane, A-248; A note on graphical reconstruction, A-305.
WILKER, John B. See BUTTON, Lillian.
WILLETT, Michael. Arithmetic in a finite field. Preliminary report, A-48.
WILLIAMS, D. L. See SHIELDS, A. L.
WILLIAMS, Lynn R. and WELLS, James H. L^p inequalities, A-118.
WILLIAMS, Michael. The validity of an asymptotic expansion of a neutron transport problem. Preliminary report, A-104.
WILLIAMS, R. T. and KELLEY, R. G., Jr. Variable scale finite element models. Preliminary report, A-351.
WILLIAMS, Ronald J. Kan extensions, group completions, and iterated loop spaces. Preliminary report, A-149.
WILLIAMS, Scott W. Recent results in the theory of box products. Preliminary report, A-144; Boxes of compact ordinals. Preliminary report, A-395.
WILLIAMS, Wiley. See EBERHART, Carl.
WILLIAMSON, Frank, Jr. The finite element method in the early calculus of variations, A-399.
WILLIAMSON, Jack. See HELLERSTEIN, Simon.
WILLIAMSON, Susan. Separable crossed product algebras. Preliminary report, A-56.
WILLSON, Stephen J. Limiting shapes for crystals, A-491.
WILSON, James A. Some new orthogonal polynomials. Preliminary report, A-326.
---. See ASKEY, Richard.
WILSON, Leslie. See GAFFNEY, Terence.
WILSON, R. L. Relationships between continuous posets and compact Lawson posets. Preliminary report, A-628.
WILSON, Robert Lee. See LEPOWSKY, James.
WILSON, Robert Ross. Lattice orders constructible by algebraic ring extensions. Preliminary report, A-453.
WILSON, W. Stephen. See RAVENEL, Douglas C.
WINKLER, William E. Recurrence of Markov processes. Preliminary report, A-161.
WISNER, Robert. See JORDAN, James.
WITTEN, Matthew. Biological extinction and iterates of morphisms with domain $D(f) = [0, s]$, A-248; A discrete time model for the growth kinetics of tandem multiplicate genes as a model for the evolution of macromolecular complexity. Preliminary report, A-543; Intuition, survival, and fitness, A-618.
WŁODARSKI, Lech. Remarks on iteration product of matrix transformations. Preliminary report, A-102.
WOAN, Wen-Jin. Full conjugate groups. Preliminary report, A-67.
WOGEN, W. R. Cyclic vectors for adjoints of subnormal operators, A-574.
---. See CIMA, Joseph A.
WOLFE, Jerry M. On the convergence of an algorithm for discrete linear L_p approximation, A-481.
WOLFOWITZ, J. The rate distortion function for source coding with side information at the decoder, A-545.
WOLLMAN, Stephen. Existence and uniqueness of the solution to the Vlasov-Maxwell system of equations. Preliminary report, A-13.
WONG, James C. S. On topological analogue of left thick subsets in semigroups, A-533.
WONG, Pak-Ken. On the smallest graphs of girth 5, A-33.
WONG, Roman W. Free ideal monoid rings, A-564.
WOOD, David H. See PAPADAKIS, John S.
WOODROW, Robert E. See LACHLAN, A. H.
WOODRUFF, Edythe P. Cellular decompositions of E^3, A-622.
WOODWARD, G. S. See McGEHEE, O. C.
WORRELL, John M., Jr. See WICKE, Howard H.
WOYCZYNSKI, Wojbor A. Domains of attraction of stable measures on Banach spaces. Preliminary report, A-337.
WRIGHT, Alden. See MESSER, Robert.
WRIGHT, David. Cancellation of certain variables. Preliminary report, A-320.
WRIGHT, David G. AR's which contain only trivial ANR's. Preliminary report, A-441.
---. See CANNON, James W.
WRIGHT, Donald J. See TRIMBLE, Selden Y.
WRIGHT, Marcus. Regularity and degeneracy of the differential Kobayashi pseudometric, A-472.
WRIGHT, Ron. Projection-valued states of von Neumann algebras, A-247.
WRIGHT, Steve. Similarity orbits of approximately-finite C*-algebras. Preliminary report, A-122; Derivations on C*-algebras. Preliminary report, A-616.
WU, Hung-Hsi. On the volume of a noncompact manifold, A-389; On the volume of noncompact manifolds. II, A-434.
WU, Jan-Mei G. Functions subharmonic in a Lipschitz domain, A-80.
WU, Pei Yuan. Hyperinvariant subspaces of the direct sum of certain contractions. Preliminary report, A-238; Jordan model for weak contractions. Preliminary report, A-292; The hyperinvariant subspace lattice of the contraction of class $C_{\cdot 0}$, A-537; Hyperinvariant subspaces of C_{11} contractions. Preliminary report, A-613.
WU, T. C. Inverses modulo quasi-weakly compact operators, A-16; A characterization of quasi-weakly compact operators. Preliminary report, A-236.
WU, Yel-Chiang. Obstructions in associative algebra, A-322.
---. See CHENG, Charles Ching-An.
WULBERT, Daniel. Rational approximation of real functions, A-482.
WULCZYN, Gregory. An application of combinatorials to the formation of like power identities in real quadratic fields. Preliminary report, A-563.
WYLER, Oswald. Continuous lattices from the viewpoint of category theory and universal algebra, A-269.
XEROUDAKES, George and MOESSNER, Alfred. On equal sums of like powers of integers, A-3.
YADAV, B. S. and JUNEJA, Pushpa. Nagy-Foiaş-von Neumann inequality and operator representations, A-11.
YAMAMOTO, Yutaka. On the existence and uniqueness of canonical realizations. Preliminary report, A-543.
YANG, Jeong S. Simple equicontinuity in topological dynamics. Preliminary report, A-146.
YAO, Andrew Chi-Chih. The complexity of pattern matching for a random string. Preliminary report, A-645.
YAQUB, Adil. See MOORE, Hal G.
---. See OUTCALT, D. L.
YAU, Shing-Tung. Some aspects of theory of elliptic equations in differential geometry, A-493.
YAU, Stephen S.-T. On strongly elliptic singularities, A-330.
YEAGY, R. W. See VAUGHAN, N. H.
YESHA, Y. See FRAENKEL, A. S.
YODER, Lane and HADA, Dennis. 2-variation of Brownian paths, A-162.
YOON, Jaihan. See LEE, Sa Ge.
YOUNG, Christopher. Convex algebraic varieties. Preliminary report, A-461.
YOUNG, L. C. See LIU, D. B.
YOUSIF, Salah M. Optimal control in Hilbert space. Preliminary report, A-348.
ZAGUSTIN, E. See KALABA, R.
ZAHN, George D. Logic and foundations. Preliminary report, A-549.
ZAIDMAN, S. Regularity property for some zero-order pseudo-differential operators, A-15.
ZAKS, Joseph. Upper bounds for neighborly families of convex polytopes, A-492.
ZALCSTEIN, Yechezkel. Solvability of the finiteness problem for linear semigroups, A-224; Solvability of the finiteness problem for linear semigroups, A-374.
ZAME, William R. Covering spaces and extensions of Banach algebras. Preliminary report, A-121.
ZAMFIRESCU, Cristina-Maria. Local and global properties of line-, middle-, and total digraphs, A-624.
ZASSENHAUS, Hans. Art. 266 in Gauss' disquisitiones

arithmetical, A-27; On the subalgebras of the classical Lie algebras, A-573.
ZEITLIN, David. Parametric solutions for a sum of 2n + 2 cubes equal to a sum of n + 2 cubes, A-7; Parametric solutions for two equal sums of 26 fifth powers, A-233; Parametric solutions for two equal sums of 22 fifth powers, A-367; Parametric solutions for a sum of 2n + 4 cubes equal to a sum of n + 3 cubes, A-414; Parametric solutions for a sum of 2n + 5 cubes equal to a sum of 2n + 3 cubes, A-528; Parametric solutions for two equal sums of 3n + 2 cubes, A-610.
ZELMANOWITZ, J. See CAMILLO, Victor P.
ZERLING, David. Dense subgroups of Lie groups, A-72.
ZIEBUR, A. D. See DERSHEM, H. L.
ZIMMER, Robert J. Restricting Lie group actions to lattice subgroups, A-339.
ZINN, J. See PISIER, G.

INDEX
Volume 24 (1977)

ABSTRACTS PRESENTED TO THE SOCIETY, A-1, A-221, A-287, A-367, A-413, A-519, A-607
Errata, Volume 23: A-191, A-278
Volume 24: A-278, A-357, A-401, A-512, A-586, A-650
Index of Abstracts–Volume 24, A-
Short Course Abstracts, A-355, A-583
Symposium Abstracts (Denver), A-189

AMS REPORTS AND COMMUNICATIONS, 142, 192, 229, 303, 395, 456
Business Meetings of the Society, 146, 307, 397
Bylaws of the American Mathematical Society, 457
Committee Appointments, 142, 456
Corporate Members and Institutional Associates, 142, 292
Council Meetings of the Society, 145, 307, 397
Endowment Fund, 460
Officers and Lecturers of the Society, 464
Officers of the Society, 1976 and 1977, 194
Prize Funds, 460
Reports of Meetings
The Summer Meeting in Toronto, 144
The October Meeting in Storrs, 192
The November Meeting in Ann Arbor, 192
The November Meeting in Columbia, South Carolina, 193
The November Meeting in Albuquerque, 193
The Annual Meeting in St. Louis, 305
The Spring Meeting in Huntsville, 308
The April Meeting in New York, 308
The April Meeting in Evanston, 309
The April Meeting in Hayward, 310
The Summer Meeting in Seattle, 395
Report of the Treasurer, 303
The Research-Expository Journal, 456
Research Fellowship Fund (AMS), 142
Special Funds, 463

APPLICATION DEADLINES FOR GRANTS AND ASSISTANTSHIPS, 62, 378, 438

ASSISTANTSHIPS AND FELLOWSHIPS
In the Mathematical Sciences in 1977-1978 (Supplementary List), 126
In the Mathematical Sciences in 1978-1979,
Stipends for Study and Travel,

BACKLOG OF MATHEMATICS RESEARCH JOURNALS, 118, 298

BOOK SALE (AMS), 445

BUSINESS MEETINGS OF THE SOCIETY
Toronto, August 1976, 146
St. Louis, January 1977, 307
Seattle, August 1977, 397

CLASSIFIED ADVERTISEMENTS, A-192, A-279, A-357, A-402, A-511, A-587, A-651

COMMITTEE ON EMPLOYMENT AND EDUCATIONAL POLICY, 466

COUNCIL MEETINGS OF THE SOCIETY
Toronto, August 1976, 145
St. Louis, January 1977, 307
Seattle, August 1977, 397

DOCTORATES CONFERRED
In 1975–1976 (Supplementary List), 68, 362
In 1976–1977, 344

EMPLOYMENT REGISTER PREREGISTRATION FORMS, A-597/A-598, A-659/A-660
Summer Employment Register (Applicant), A-406

ERRATA TO ABSTRACTS
Volume 23: A-191, A-278
Volume 24: A-278, A-357, A-401, A-512, A-586, A-650

FEATURE ARTICLES, By Author
Donald J. Albers, 106
R. H. Bing, 287
Truman Botts, 176
Felix Browder, 456
Walter Feit, 110
Wendell H. Fleming, 103, 342
J. K. Goldhaber, 435
Paul R. Halmos, 283
Peter Hilton, 435
John W. Jewett, 105
Nathan Jacobson, et al., 432
Eugene H. Lehman, 426
Arthur P. Mattuck, 6
Phoebe J. Murdock, 63
William H. Pell, 279
Stephen Smale, 436

FEATURE ARTICLES, By Title
Acknowledgements, 288
A Mathematical Visit to China, May 1976, 110
Applied Mathematics Training, NAS-NRC Committee, 435
Blind Refereeing, Call for Information on, 226
CBMS Survey of Two-Year College Mathematics Programs, 1975–1976, 106
CBMS Undergraduate Study, 1975–1976, 105
Combined Membership List 1977–1978, 179
Committee on Academic Freedom, Tenure, and Employment Security, 229
Committee on Human Rights of Mathematicians, 229, 431
Doctorates, Report on the 1977 Survey of New, 342
Election Information, 1977, 272
Employment Information for Mathematicians, 297, 377, 428
Executive Director, American Mathematical Society, 116
"Foreign Membership" or "Reciprocity Agreements"?, 6
Gordon L. Walker Retires as Executive Director of the Society, 429
Human Rights of Mathematicians, Report of the Committee on, 431
The Major in Mathematics, 436
Mathematical Reviews, 287
Executive Editor, 335
Associate Editors, 335
Mathematical Sciences Employment Register, 376
NAS-NRC Committee on Applied Mathematics Training, 435
National Science Foundation Budget, 119
New Alphabets and Symbols for Typesetting Mathematics, 63
The Nominating Committee for 1976, 214
Nominations for Vice-President or Member-at-Large, 212

Officers and Committee Members of the Society, 299
Page Charges, Purpose, Policy and Practice, 117
Registration Fees at AMS Meetings, 423
The Research-Expository Journal, 456
Report on the 1977 Survey of New Doctorates, 342
Research Proposals Submitted to the Mathematical Sciences Section, National Science Foundation, 279
Some Very Young Mathematicians, 426
Suggestions for 1978 Nominations, 363
Translation Recommendations, 371
Two-Year College Mathematics Programs, The 1975–1976 CBMS Survey, 106
Two-Year College Survey (AMS), 103
Undergraduate Study, The 1975–1976 CBMS, 105
Washington Report: Science and the New Congress, 176
What a Book Review is, and is Not, 283

GIFT CERTIFICATE (AMS), 439

INVITED SPEAKERS AT AMS MEETINGS, 61, 97, 175, 211, 268, 323, 409

INTERNATIONAL CONGRESS OF MATHEMATICIANS, 274

LETTERS TO THE EDITOR, 76, 140, 180, 224, 269, 372, 433
Robert G. Bartle, 433
F. R. Buianouckas, 224
Paul J. Campbell, 224
George Glauberman, 225
Gerald Goldstein, 182
Judy Green, et al., 373
Carl Herz, 183
John R. Isbell, 372
Yakar Kannai, 433
H. Jerome Keisler, 269
Vadim Komkov, 269
Duro Kurepa, 140
Thomas J. Laffey, 182
Howard Lambert, 77
Serge Lang, 224
Violet H. Larney, 141
Mathematician's Action Group, 373
Arthur Mattuck, 76
Leopoldo Nachbin, 77
Gerald J. Porter, 140
Robert A. Rankin, 224
Miles Reid, 180
Peter Rosenthal, 433
Andrew Rukhin, 269
Jane Cronin Scanlon, 269
Jane Cronin Scanlon, et al., 76
Igor R. Shafarevich, 141
Mark Sheingorn, 372
Allen L. Shields, 140
Alan Shuchat, et al., 269
Albert Wilansky, 372

MEETINGS OF THE AMS
Abstracts Presented at Meetings of the Society, A-25, A-265, A-304, A-399, A-446, A-561, A-624
Calendars of Meetings, Inside Front Cover
Preliminary Announcements
March: Huntsville, Alabama, 57
April: New York, New York, 91; Evanston, Illinois, 58, 92; Hayward, California, 59, 94
August: Seattle, Washington, 166, 196
October: Wellesley, Massachusetts, 264; West Lafayette, Indiana, 211, 265
November: Memphis, Tennessee, 266, 319; San Luis Obispo, California, 267, 320
January 1978: Atlanta, Georgia, 324, 410
March 1978: Columbus, Ohio, 420; New York, New York, 421
Programs of Meetings
January: St. Louis, Missouri, 2
March: Huntsville, Alabama, 86
April: New York, New York, 148; Evanston, Illinois, 154; Hayward, California, 161
August: Seattle, Washington, 234
October: Wellesley, Massachusetts, 312; West Lafayette, Indiana, 315
November: Memphis, Tennessee, 400; San Luis Obispo, California, 404
Short Course
On Statistics, St. Louis, 3
Fundamentals of Applied Combinatorics, Seattle, 167, 197, 235
Numerical Analysis, Atlanta, 325, 411
Short Course Abstracts
Fundamentals of Applied Combinatorics, Seattle, A-355
Numerical Analysis, Atlanta, A-583

NEW AMS PUBLICATIONS, 78, 138, 185, 216, 293, 379, 443

NEWS ITEMS AND ANNOUNCEMENTS, 83, 113, 184, 189, 227, 232, 283, 388, 442

ORGANIZERS AND TOPICS OF SPECIAL SESSIONS, 61, 97, 175, 210, 268, 323, 409

PERSONAL ITEMS, 74, 137, 191, 225, 302, 384, 444

QUERIES, 82, 136, 190, 222, 271, 386, 442

RECIPROCITY AGREEMENTS (AMS), 276
Supplementary List, 430

REPORTS AND COMMUNICATIONS (AMS), 142, 192, 229, 303, 395, 456

RESERVATION AND PREREGISTRATION FORMS, A-285, A-365, A-411, A-518, A-599, A-603, A-658, A-662

SALARY SURVEY
Twentieth Annual, Second Report, 98
Twenty-first Annual, First Report, 336

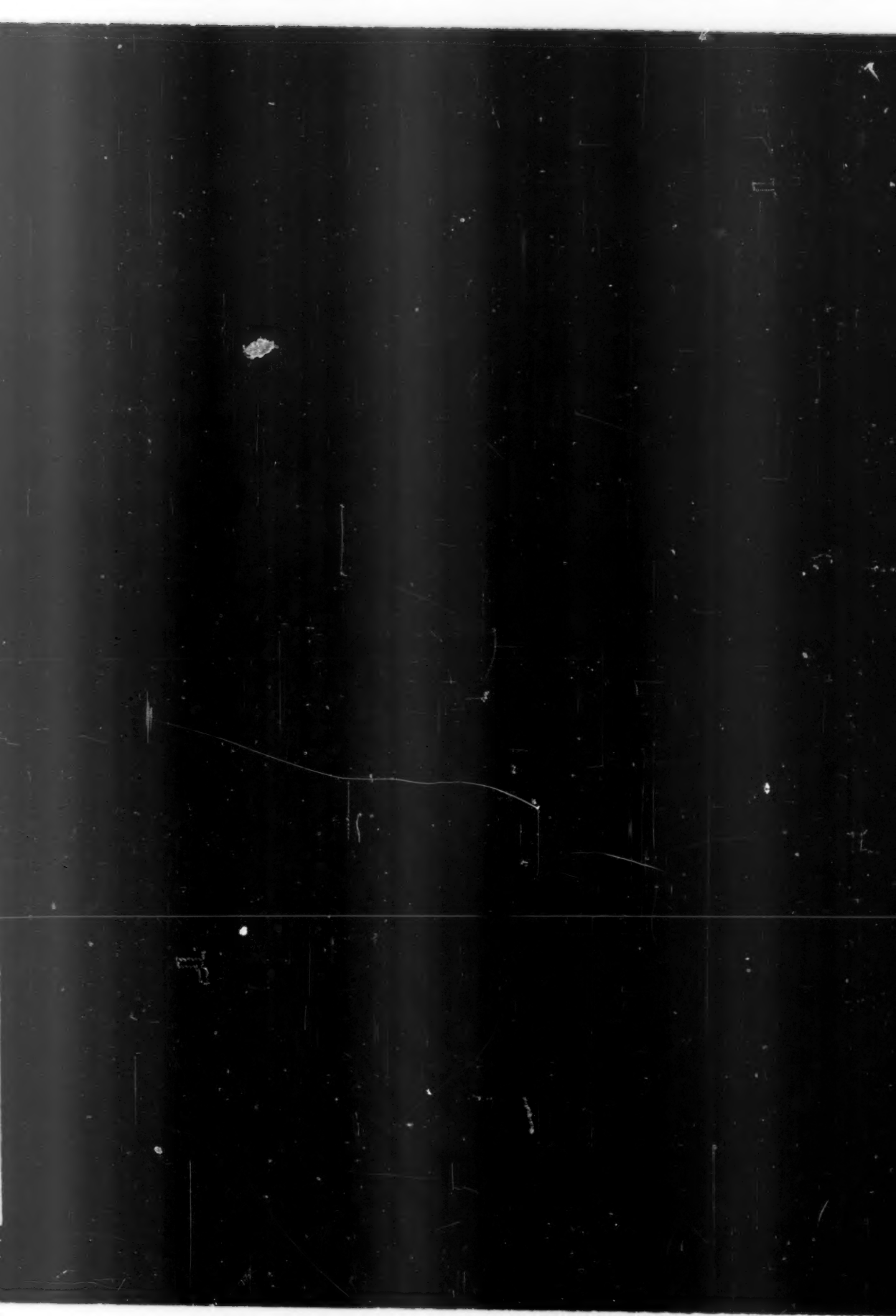
SEMINARS AND INSTITUTES
1977 Summer Research Institute on Automorphic Forms, Representations, and L-Functions, 60, 96
Final Report on 1977 Summer Research Institute, 334, 425
1978 Summer Seminar in Applied Mathematics, 422

SITUATIONS WANTED, A-191, A-279, A-356, A-401, A-512, A-586, A-650

SPECIAL MEETINGS INFORMATION CENTER, 70, 130, 186, 218, 280, 374, 440

SPECIAL SESSIONS, ORGANIZERS AND TOPICS, 61, 97, 175, 210, 268, 323, 409

SUMMER GRADUATE COURSES, 120
Supplementary List, 178

SYMPOSIA
Symposium on Some Mathematical Questions in Biology, Denver, Colorado, 56
Abstracts, A-189
Symposium on Computational Fluid Dynamics, New York, 58, 91, 148
Symposium on Some Mathematical Questions in Biology, Washington, D. C., 333, 420
Symposium on Relations Between Combinatorics and Other Parts of Mathematics, Columbus, 420
Symposium on Mathematical Problems in Fracture Mechanics, New York, 421

VISITING MATHEMATICIANS, 364
Supplementary List, 69, 135, 436